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## ORIGINAL LECTURES.

### SUPRACONDYLOID OSTEOTOMY FOR THE RELIEF OF GENU-VALGUM BY MACEWAN'S METHOD.

*A Clinical Lecture delivered at St. Mary's General Hospital, Brooklyn.*

BY GEORGE R. FOWLER, M.D.,  
SURGEON TO THE HOSPITAL.

GENTLEMEN: We are indebted to Dr. G. B. Banks, of Huntington, L. I., for the very interesting case which I now have the pleasure of presenting to you. The patient, a little colored girl of four and a half years, and up to a year and a half ago healthy and well-formed, in this latter respect being like her brothers and sisters, in several of which she rejoices. When three years of age, she suffered from an attack of measles of some severity, and when convalescing it was noticed that her lower extremities were "out of shape." You will observe that, when she stands erect, the deformity consists of double genu-valgum, together with both anterior and outward tibial curves upon either limb.

You will notice that the inner condyles are in close apposition, while the malleoli are widely separated, by, say, about ten inches. Now, this is not entirely due to the elongated inner condyles, although it must be evident to you that the deformity is in a great measure due to such elongation, since the latter condition is plainly to be seen. The outward tibial curves, however, occupying the lower two-thirds of each bone, contribute somewhat to the wide separation of the feet. The anterior curve in each tibia adds to the child's awkward appearance. Therefore, we have, first, a genu-valgum due to an overgrowth of the inner condyles, either relative or absolute; second, a long outward curve of each tibia; and, third, an anterior curving of the latter likewise.

I regret that I cannot give you the above changes in the order of their occurrence; my belief, however, is that the tibial curves first developed, and that they occurred probably from some peculiarity of position while sitting in bed and convalescing from her illness; and that the genu-valgum, thus initiated, increased upon attempts at walking being made. It has been thought that the muscles, acting upon the softened osseous structures, were the active agents in the production of this class of deformities; but it must be apparent that, at the time when these develop, the muscles are themselves weakened and inactive.

The patient being chloroformed, we will proceed to have her thoroughly scrubbed with soap and water by means of a rather coarse and stiff flesh-brush, and afterwards doused with a warm solution of mercuric bichloride of the strength of 1 to 1000. The rest of the body, as well as the operating-table, will then be isolated from the parts to be operated upon by means of towels wrung out of the bichloride solution. While the house-

surgeon is attending to these details, I will briefly call your attention to one or two operative methods other than supracondyloid osteotomy for the correction of genu-valgum. The method known as Ogston's was the first operation introduced, having for its object the "levelling up," as it were, of the articular extremities of the femoral condyles. Recognizing in the elongated inner condyle the key to the deformity in the vast majority of instances, Ogston, of Aberdeen, devised the operation which bears his name, and by means of which he sought to separate the condyle from the shaft by a subcutaneous section with an Adams's saw, and then forcing the detached mass of bone upwards until the articular surfaces of the condyles were sufficiently near to the same plane as to allow the tibia to be brought into proper line. I have operated by this method, and can testify to both the ease with which it can be performed and its gratifying results. The last patient upon whom I operated by this method, however, was a little girl of not quite three years of age, in whom the result at first was perfect; but, as time wore on, a genu-varum or out-knee developed, due, no doubt, to the interference with the epiphysis and consequent arrest of or retardation of growth in the inner condyle. In a correspondence with one of the most eminent of English surgeons, the late Mr. Callender, just before that gentleman's lamented death, in speaking of this case he expressed to me a fear that the very condition which subsequently supervened, would occur. Owing to this very serious objection to Ogston's operation, it should be reserved, if performed at all, for cases occurring in adult life.

Reeves's operation consists in making the section with a chisel instead of a saw, and not perforating the cartilage covering the articular surface of the femur. The condyle is then pushed up in the same manner as after Ogston's section with a saw. It is difficult to conceive how the normal plane of the two condyles can be restored and their articular surfaces brought to the same level without breaking through or tearing the articular cartilage at a point corresponding to the line of section of the bone; in which case it becomes an Ogston's operation, performed with a chisel instead of a saw.

Chiene, of Edinburgh, made a further modification by removing with a chisel a wedge-shaped portion of the inner condyle at or near its junction with the shaft, claiming to keep entirely outside of the joint and above the epiphysis. There is reason to believe, however, that neither of these points can be assured, in which event no advantage is gained over Ogston's method, and a much more tedious and difficult procedure is substituted.

Taking all things into consideration, therefore, it may be stated as a general proposition that if the deformity can be corrected by making the section in such a manner as to keep well above the epiphyseal line and outside of the joint, the simplest method of accomplishing that result should be chosen. The operation known as Macewan's supracondyloid osteotomy seems to fulfil all

these requirements; and it is this operation that I propose to demonstrate to you upon this patient.

It is but just to state that at the last International Medical Congress, held at Copenhagen in August, 1884, in the course of a discussion upon genu-valgum, both Ogston and Chiene publicly abandoned the operations which bear their respective names in favor of the method of Macewan.

Allow me to call your attention to the instruments necessary for the performance of this operation. They consist of a common scalpel, a set of Macewan's osteotomes, a medium-sized wooden mallet, such as is used by cabinet-makers, and an oil-silk pillow filled with sand, the latter sublimated after the manner of Kümmel, of Hamburg. The object in having the sand sublimated is to avoid contamination of the parts should the pillow become, by any mischance, punctured or bursted, and its contents spilled. The osteotomes of Macewan, although not absolutely necessary, for almost any long, aperiosteotomy will answer, are undoubtedly the very best instruments for the purpose. There are three of them, and if you will examine them you will perceive that they differ in the character of their wedge shape or taper. The object of this difference is to facilitate the making of the section by withdrawing the one having the broadest base (which is first used) should it become wedged or jammed in the bone, and substituting one having a medium amount of taper, which will work freely in the track previously made by the thicker one. Should this, in its turn, become wedged, it is withdrawn and the one having the least amount of taper used to complete the operation.

The points given by Macewan for the proper performance of the operation are as follows: With the limb extended, ascertain the upper margin of the external condyle, and measure a finger's breadth above the same; draw a line from this point across the anterior surface of the limb, this line to be at right angles to the long axis of the femur, and *not* parallel with the articular surfaces of the condyles. Now draw a line along the inner aspect of the limb parallel with its long axis and about half an inch above the tendinous insertion of the adductor magnus. At the point where these two lines intersect is where the incision is to be made.

Esmarch's bandage having been applied, the child will now be turned slightly upon its side so as to have the limb rest firmly upon the sand pillow, and the operation commenced by driving the knife directly down to the bone at the point just indicated; it is now moved slightly from side to side so as to enlarge the incision, and the osteotome slipped down alongside of it. The knife is now withdrawn, and the osteotome turned a quarter of the way around so as to bring its edge at right angles to the limb, when it is struck a smart blow with the mallet; this first blow being given with sufficient force to drive the instrument well through the exterior hard shell of bone, the extremity of the osteotome being directed toward the point where the first line commenced—*i. e.*, a finger's breadth above the external condyle. A few sharp blows are given, the instrument being made to traverse a fresh path each time across the thickness of the bone, and in a direction radiating, as it were, from the original point of entry; for you will see that I am working all the time through the opening in the exterior shell of bone made by the first blow of

my mallet. In this way the entire transverse thickness of the bone is quickly divided, except a small portion immediately anterior and posterior to the first opening; by a few strokes enlarging the latter, this portion is divided. The limb is now firmly grasped above and below the knee, and forcibly straightened; a crunching noise being heard as the femur gives way. Care should be exercised at this stage of the operation, and if the parts do not give way readily, the cause should be sought for in a too limited application of the osteotome; for the exercise of too much force to straighten the limb may lead to either a rupture or overstretching of the external lateral ligament of the knee-joint, and a loose, lateral movement of that articulation occur as a final result.

The wound is now irrigated with the mercuric bichloride solution, and any projecting portions of fat snipped off with a pair of scissors; this, if allowed to remain, interfering with immediate union, and leading to suppuration—a most undesirable circumstance. The edges are now approximated, and a continuous catgut suture used. A little iodoform is dusted over the parts, and a cushion of sublimated paper-wool applied. The tourniquet of the Esmarch bandage is removed, and, no bleeding occurring, the limb is at once encased in a plaster-of-Paris splint.

(The other limb was now operated upon and dressed in a like manner.)

We will now fasten the little one's limbs together and put her to bed, fully assured that if our antiseptic precautions have been thorough, but slight, if any, reaction or disturbance will follow. The tibial curves will be dealt with upon another occasion.

NOTE, JAN. 11, 1885.—Between the second and third day, a slight rise in temperature occurred (100° F.). In a few hours it sank to the normal, and no further rise took place. During the second week, the plaster-of-Paris splints were removed, and a Hamilton's double splint for fracture of the femur in children substituted. To-day, just one month from the day of operation, the dressings from the wounds were removed for the first time; the latter were found to be healed, and but a slight cicatrix marking their site. Passive motion will be practised daily, and for the first few days the limbs will be bound together with a compress of cotton between the knees. After that the child will be allowed to move itself about in bed, and finally to walk with the aid of a chair, pushing the latter before it about the ward.

## ORIGINAL ARTICLES.

### TWO CASES OF LIGATURE OF THE COMMON CAROTID ARTERY FOR TRIGEMINAL NEURALGIA.<sup>1</sup>

BY JOSEPH C. HUTCHISON, M.D.,  
SURGEON TO THE BROOKLYN HOSPITAL.

CASE I.—Daniel C., 45 years old, born in Ireland, and a gold-digger by occupation, entered the Brooklyn City Hospital September 4, 1871, suffering from neuralgia of the left inferior maxillary nerve. His general health had always been good. From 1855

<sup>1</sup> Read before the New York Surgical Society, March 24, 1885.

to 1867 he was engaged in mining in California, and, although much exposed to wet and cold during this time, he was never kept from work by illness. In the autumn of 1867, he was attacked with sharp, stinging pain in the region of the lower jaw, occurring in paroxysms every two or three hours. The paroxysms increased in frequency and severity for the two succeeding years, compelling him to give up work. During this period the three molars and the adjoining bicuspid of the left side of the inferior maxilla were removed, but the removal of the teeth, which were sound, gave no relief.

In the spring of 1871, previous to which time he had been under my treatment for several months with only temporary improvement, the last upper molar of the left side was removed by a surgeon in Boston. The pain ceased, and the case was reported as one of cure.<sup>1</sup> Three weeks after the removal of the tooth the paroxysms of pain returned, and were as severe as before.

When the patient entered the hospital he was somewhat emaciated, and his strength was impaired. Paroxysms of pain, described as stinging, burning, recurred every few minutes day and night. The patient relieved himself somewhat by violent friction with his hand over the seat of pain.

September 6, 1871, Gross's<sup>2</sup> operation of exsection of the alveolar process for neuralgia of the jaw-bones was performed. An incision was made along the edentulous alveolar ridge on the left side of the lower jaw as far forward as the first bicuspid tooth; the soft parts, including the periosteum, were turned aside with a periosteotome, and the alveolar processes were gnawed off with a rectangular gouge forceps to a level with the palatine process. The bone and soft parts seemed to be healthy. No sutures were used. The wound healed rapidly, and the patient was entirely relieved. Twelve days after the operation he was discharged, apparently well, and five months afterward he reported that there had been no recurrence of pain since the operation. The case was again reported as cured; this time by the writer.<sup>3</sup>

He returned to California, and resumed his occupation as a miner. The pain returned in its former severity, but I am unable to state how soon after the last operation. The dental branch of the inferior maxillary nerve was excised by a California surgeon. This operation relieved him entirely for three years; but whether it was also reported as having cured the patient, I am unable to state.

He again applied to me for treatment in June, 1877, nearly ten years having elapsed since the disease first began. The pain occupied the same locality as before, in his lower jaw, radiating to the corner of his mouth and lips, and occurred in paroxysms of intense severity every half hour. He obtained only temporary relief from electricity and the usual medicinal remedies for this condition, and in desperation implored that operative surgery, which had previously brought him relief, should again be appealed

to. For this purpose he was readmitted to the Brooklyn City Hospital, and on June 30, a carbonized catgut ligature was applied to the left common carotid artery. Antiseptic dressings were used. The wound healed by first intention, and after the operation there was prompt and complete cessation of pain. No untoward symptoms occurred, except a slight hoarseness, which continued for a year, and suddenly left him, and he was discharged cured a second time, according to the hospital record, July 16, 1877.

One year and a half after the operation, January 23, 1879, he wrote from California that he was quite well, and entirely free from neuralgia, and I hoped that his untractable enemy was finally subjugated. But I was disappointed. In September, 1883, he again presented himself for treatment, and stated that for three years and eight months after ligature of the common carotid he was free from pain. It then returned, but with less severity, soon after he began to work in damp places. I now advised him to seek employment in a drier atmosphere, and he promised to report himself to me if the pain did not subside. I have not heard of him since.

CASE II. *Neuralgia of the first and second divisions of the fifth nerve of thirty years standing. Ligature of the common carotid artery and neurectomy.*—C. N., aged 49, a native of Ireland, and a carpenter by occupation, came under my care at the Brooklyn City Hospital, June 10, 1878, for very severe neuralgia of the first and second branches of the fifth nerve. He stated that March 12, 1848, thirty years before, he was suddenly attacked with severe pain in the right cheek after washing his face in cold water. Previous to that time he had enjoyed good health, and there was no family predisposition to any disease. The pain was very intense, and extended from the right cheek and right side of the nose backwards along the track of the superior maxillary branch of the fifth nerve. He had occasional pain also in the right side of the forehead. The pains were paroxysmal, occurred at short intervals, and were excruciating. He alleges that he was treated at that time by copious bloodletting, and had no more pain for five or six months, when it returned with its former severity, and continued for three years, when he applied to the late Dr. Ackley, of Cleveland, Ohio, for surgical treatment. This eminent surgeon made a long incision through the scalp above the right ear, but the operation gave no relief. He then visited New York and Philadelphia for treatment; various internal remedies were prescribed, but without any benefit, and he was told by Dr. Valentine Mott that he could do nothing for him. September 19, 1856, he sought relief in Bellevue Hospital, and came under the care of the late John A. Lidell, M.D., who at that time reported the case.<sup>1</sup> Dr. Lidell made an incision near the right supraorbital notch, and excised the principal branches of the supraorbital nerves to the extent of about three-eighths of an inch. He then cut down upon the infraorbital filaments near the infraorbital foramen for the purpose of excising them, but the hemorrhage was so free that he was unable to see them, and he contented

<sup>1</sup> Boston Med. and Surg. Journal, vol. viii. p. 82, 1871.

<sup>2</sup> In Transactions of American Medical Association, vol. 21, p. 198.

<sup>3</sup> The American Medical Journal of the Medical Sciences, January, 1874.

<sup>1</sup> New York Journal of Medicine, third series, vol. 1, p. 317.



himself by simply dividing them. These operations gave the patient six months immunity from pain; it then returned as severely as before, when Dr. Lidell opened the infraorbital canal and excised half an inch of the trunk of the superior maxillary nerve. Six days afterwards he was discharged from the hospital relieved, but how long the relief continued is not known. He was next treated by Dr. Willard Parker, Sr., with internal remedies, but received only transient benefit.

This poor fellow entered the Brooklyn City Hospital in 1860, suffering intensely, and a portion of the right superior maxillary nerve was again excised by Drs. George Cochrane and Charles E. Isaacs. The operation gave him relief only until the incisions had healed. He came under my observation June 10, 1878, as before stated, at the Brooklyn City Hospital. He had frequent paroxysms of severe pain, lasting from five minutes to half an hour, and for the last month he states that the paroxysms have been more severe than ever before. His suffering had now extended over a period of thirty years, with occasional intervals of relief after some grave surgical operation. Medical treatment had given him only transient comfort, and he desired that some operation might again be tried to secure him immunity from pain. Encouraged by the result in a previous case, I suggested ligature of the right common carotid artery, and after having explained to him its dangers and the uncertainty of obtaining relief from the operation, he begged that it should be done as speedily as possible. I applied a ligature to the artery June 21, 1878, above the omohyoid. It came away on the nineteenth day. No cerebral symptoms followed the operations, nor were the paroxysms of pain diminished either in frequency or severity in the slightest degree, notwithstanding the liberal use of hypodermic injections of morphine after the operation. I now decided to try excision of the intraorbital nerve again. A semi-elliptical incision was made along the lower border of the orbit down to the bone, and the soft parts were separated by an elevator from the orbital plate of the superior maxillary bone back to its posterior border. It was my intention to divide the nerve where it enters the infraorbital canal at the speno-maxillary fissure, and then divide it in front where it emerges from the infraorbital foramen, and draw out of its canal the portion of the nerve lying between the sphenoidal fissure and the infraorbital foramen.<sup>1</sup> I found it impossible to do this operation systematically owing to the altered condition of the parts due to former operations, and I contented myself with scraping out the entire contents of the canal, hoping that the canal might be obliterated and take on new bony formation and prevent a recurrence of the excised nerve. The patient was immediately and entirely relieved of pain by the operation, and remained well until he was discharged, August 31. A few days subsequently he presented himself again, and complained of severe pain in the inferior maxillary nerve, extending from the right mental foramen backwards, over the right cheek, which he declares is

as intense as his former pains were. I lost sight of him after this.

*Recapitulation of the operations.*—First case: 1. removal of the right upper molar tooth was followed by relief from pain for three weeks, although there had been no pain in the course of the superior maxillary nerve at any time

2. Removal of the alveolar process of the lower jaw gave complete relief for more than five months, but how much longer I cannot state.

3. Excision of inferior maxillary nerve relieved the pain for three years.

4. Ligature of the left common carotid resulted in relief from the neuralgia for three years and eight months. No cerebral symptoms followed the operation, and none has appeared after a lapse of nearly four years.

Case second: 1. Incision of the scalp with no benefit.

2. Excision of the branches of the supraorbital nerve near the supraorbital notch, and at the same time incision of the infraorbital filaments of the superior maxillary nerve near the infraorbital foramen, relieved the neuralgia for six months.

3. Removal of half an inch of the superior maxillary nerve from the infraorbital canal was followed by freedom from pain for an unknown period of time.

4. Excision of the superior maxillary nerve in the infraorbital canal was repeated ten years after the last operation, but the neuralgia returned as soon as the incisions had healed.

5. Ligature of the right common carotid, twelve years after the last operation. There was no relief from pain, and no cerebral symptom followed the operation.

6. Removal of the superior maxillary nerve from the infraorbital canal a third time, a little more than ten years since it was last removed. During the two and a half months after the operation that he was under observation he was free from pain, but then began to complain of neuralgia in the inferior maxillary nerve. I now lost sight of him.

The operation of tying the common carotid artery for trigeminal neuralgia, which was first recommended and practised by Nussbaum and Patrubau, has been practised by other surgeons with a fair amount of success. Hüter<sup>1</sup> refers to fifty-four cases, of which three died—5 per cent.—and remarks, incidentally, that the operation was performed after all other treatment, medical and surgical, had failed. Prof. John A. Wyeth<sup>2</sup> has tabulated fourteen cases, one of which was the first case reported in this paper. He classed it among the cured, but the disease returned since the publication of his paper, three years and eight months after the artery was tied. Ferdinand H. Gross, M.D., of Philadelphia,<sup>3</sup> has added one case, and the writer has reported another in this paper. Of these 16 cases, which were quite fully reported, 1 died; 15 recovered; 2 total failures; 8 were cured; 6 temporarily relieved—one for two years, one for three years and eight months, one for four years, one for eight months, one for eleven months, and

<sup>1</sup> This operation was described by Hodgen, of St. Louis. See Transactions American Medical Association, vol. 31, p. 773

<sup>2</sup> Grundriss der Chirurgie, vol. 2, p. 233.

<sup>3</sup> Essays on Surgical Anatomy and Surgery, New York, 1879.

<sup>4</sup> The Amer. Journ. of the Med. Sciences, April, 1883, p. 366.



in one relief was not of long duration. The operation, it seems to me, is worthy of further trial in severe cases which have resisted all other treatment, medical and surgical. It has been suggested that the same results would be accomplished by ligature of the external carotid, where branches supply the trigeminal nerves.

The treatment of trigeminal neuralgia is, it must be confessed, largely empirical in its character. A rational and discriminating treatment must be based upon a more thorough knowledge of the morbid conditions which produce the symptom. Such investigations have thus far been very incomplete.

#### CASE OF TONIC SPASM OF THE ACCESSORIUS SUCCESSFULLY TREATED BY GYM- NASTICS AND MASSAGE.

BY H. G. BEYER, M.R.C.S.,

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Miss L. S. M., thirty-five years of age, consulted me about the first week in April, 1884, concerning some trouble in her neck and head. She said she could not retain her head in the desired position, and complained of more or less severe pain in the back of her neck, somewhat indefinitely located between the posterior upper angle of the left scapula and the vertebral column. She was lying in bed at the time, and had been occupying this recumbent position for several months. On rising, her face would immediately turn toward the left side, her chin at the same time moving slightly upwards, and she could only, by the greatest effort of her will, succeed in turning it in the opposite direction for a moment, when it would immediately return to its former one-sided position, toward the left. The only way she could make herself comfortable was to lie down and keep her head well supported by pillows.

Her father, a very successful and much respected physician of New York State, died of pneumonia; her mother, at an advanced age, died of heart disease. Several of her brothers and sisters are now living and enjoy good health.

She is a highly educated and refined lady of regular habits, having spent much of her life in New York, and has remained free from any serious disease up to date. While yet a child she had the measles, scarlatina, and the whooping-cough. There are no traces of any hereditary or constitutional taint about the patient, so far as can be made out.

In October, 1882, she received news of the sudden death of a gentleman to whom she was soon to have been united in marriage. The shock was so great, and the grief so overpowering, that she was unable to eat or sleep during the following week. On the 22d, the seventh day after receiving this news, while seated at the dinner table, she noticed a twitching movement which was, to use her own words, "quick, sharp, and noticeable as an electric shock."

From this time on it grew gradually worse; and she was constantly obliged to rest her head against the back of a high chair while in a sitting position. Not thinking it very serious, although very annoying,

she did not deem it necessary to call in medical aid until April following. Several irregular physicians then were consulted in succession; the trouble, however, grew worse instead of better. She then applied to several prominent nerve specialists of New York City. At this time, July, 1883, she was utterly unable to manage her head by force of will, but was obliged to use her hands to support it in the desired position: the exertion required to do this, made the otherwise constant pain in the back of the neck more severe and intolerable.

From July to October, she was treated by electricity, and hypodermic injections of atropia, made all along the right sterno-cleido-mastoids, taking zinc pills internally. The thermo-cautery was also freely used over the back of the neck. After a three months' course of this most rigorous form of treatment, conscientiously carried out by the most experienced hands of the profession and faithfully submitted to by the hopeful patient, and finding herself growing steadily worse, she lost hope and courage and gave up the treatment in October. She afterwards received magnetic treatment at the hands of a doctor in Geneva, N. Y. This also proved of no avail, and so a number of physicians were consulted without benefiting her in the slightest. Thus, thoroughly discouraged and disheartened, and thinking perhaps that a change of climate might prove beneficial she came to Baltimore, in February. At this time one of her sisters accompanied her. Upon her arrival she spent most of her time in bed, going out only occasionally, deeply veiled, her head held in the middle line by a bandage peculiarly contrived by herself for the purpose. She always returned very much exhausted and resumed her accustomed position in bed. This, in a few words, is the history of the condition I found her in when I first had an opportunity of seeing her, which was about the middle of March, 1884.

This visit was merely a social one, and my professional services were not solicited until about three weeks later, and then only for some trouble which suddenly supervened. The case as it appeared when I was called in, may be briefly described as follows, viz.: Patient was lying in bed, having become very weak and emaciated since the last time I saw her, complaining of severe pain in the epigastric region; this pain was accompanied with a constant, almost uninterrupted retching, and nourishment of any kind could not be retained. In this condition she had been for twenty-four hours previous to the time of my visit. Her pulse was very weak and somewhat increased; temperature was 102° F., respiration more frequent than normal, probably from mechanical interference from the constant retching. With perhaps a slight bulging over the epigastric region and a certain amount of pain on pressure, there was nothing abnormal whatever about the abdomen.

She had always been regular and had never had any uterine or ovarian disease; firm pressure over those regions did not produce the slightest discomfort at the time.

The two per cent. hydrocyanic acid was prescribed, and two drops of it ordered to be taken every half

hour. After four doses had been swallowed, the retching grew less and only recurred at much longer intervals. Patient slept a good portion of the night, taking the medicine when awake. The retching ceased entirely twenty-four hours after she first began taking the medicine.

She now asked me to treat her for the spasmodic trouble, which I promised to do on condition that the treatment, which I had already in my own mind determined upon, should be faithfully carried out.

I think that no physician, from what has already been said, can doubt that the case in hand was one of *spasm of the spinal accessory nerve* of the right side, and that, moreover, if we have to differentiate between spasm and spasm, it might be called a mild case of *tonic spasm*, originating in a central disturbance of the motor portion of the nerve.

It did not seem to me to be a case of clonic spasm for the following reasons, viz.: Her head would remain on the left side when she was in the sitting posture and, although for a few seconds and by great effort of the will, she could turn it in the opposite direction for a couple of times, the time did arrive when no amount of will-power was sufficient to stay it from turning to the left. On the other hand, it did not present the characters of the condition known as *caput obstipum spasticum*. It was central in origin, because both the trapezius and sterno-mastoid were involved. It was *not hysterical* in nature, as may well be inferred from the history of the case, and also from the fact that general sensibility over both sides of the body was uniformly normal and the tendon reflexes well marked. The head was turned strongly to the left, the chin raised considerably and the occiput approximated slightly to the right shoulder. Besides this, the left shoulder and clavicle were very much higher when compared with the corresponding shoulder and clavicle of the right side.

There was also a slight lateral curvature of the cervical portion of the spinal column (convexity to the right), due probably to the habit into which patient had fallen—from necessity, of course—of forcibly throwing her head with the left hand, and aided by the spasmodic contractions of the trapezius muscle of the right side. There was a constant pain at the back of her neck, exaggerated when in the upright position for any length of time. While in this latter position the right sterno-cleido-mastoid and trapezius muscles felt firm without being exactly rigid, the corresponding muscles of the left side were flabby and much less prominent even when in active contraction.

Regarding the *etiology* of the trouble in this case, the circumstances point clearly to grief from the loss of her friend. No history of exposure of any kind is given, as she kept closely in her room during the seven days that intervened between the receipt of the sad news and the first beginning of the trouble.

The *treatment* at first was, of course, directed toward improving her general health, without which no local trouble can be expected to yield permanently to any kind of treatment. During the first week, therefore, little was done excepting to regu-

late her diet on the best principles of nutrition adapted to the needs of her own special case and requirements. At the end of only one week she had gained so much, and felt so much better, that it was deemed advisable to begin a systematic and graduated course of gymnastics and massage. She received one thorough general massage three times a week, and a local one applied to the neck only every day for the first two weeks. For the following two weeks of the treatment general massage was applied twice a week, and local massage to her neck four times a week. The strictest attention to diet was constantly observed: her appetite improving wonderfully during that time. Besides massage she was enjoined to take active exercise, which consisted in swinging a bar, which she grasped with both her hands and threw out in different directions a certain number of times, according to her powers of endurance. While performing this exercise she was directed to look constantly at a certain object a short distance in front of her, and so placed as to keep her head and face in the middle line when looking at it. For the purpose of exercising the lower limbs she was made to pace the floor after the manner which is best calculated to reach all the muscles of the lower extremities, as well as those of the lower portion of the trunk, and keep them all in active exercise. During any and all of these exercises she was never allowed to put her hand to her head to steady it. It required constant reminding to break her of this habit. Whenever she could not keep her head erect, her nose pointing straight forwards, she was told to lie down. This always formed the guide with regard to the length of time the exercise might continue. Twice every day, generally morning and evening, this exercise was superintended by myself, and during it every means was employed to keep the patient in the best possible spirits. She was, however, directed to resume the exercise of both upper and lower extremities during the intervals of my visits, and keep an account of the number of times she had gone through it. From the second week on, she was ordered to take daily walks out of doors, observing the same rules as during in-door exercise. At first she thought it was an impossibility, and it was only after the strongest kind of urging that she consented. From the latter part of the second week her improvement was so rapid that it was not only astonishing to herself, but also to her friends. As she grew better she finally recognized the fact that it was as necessary for her complete recovery to exercise her will as it was to exercise her muscles.

During the last week of my treatment she visited her friends, staying for hours at a time, keeping the movements of her head under perfect control; only now and then, when feeling a little tired, she rested her head against the back of a high chair.

In this condition she left Baltimore to go to the seashore about the first of June, under orders not to give up the exercise and other treatment. I saw her the following September, meeting her on the street, when she looked a perfectly healthy woman. It is now nearly a year ago, and every occasional letter I receive convinces me of the permanent success of this treatment in her case.

## DISINFECTANTS.

PRELIMINARY REPORTS OF THE COMMITTEE ON DISINFECTANTS OF THE AMERICAN PUBLIC HEALTH ASSOCIATION.

## VIII.

## ON THE DISINFECTANT PROPERTIES OF PUTREFACTIVE PRODUCTS.

BY CHARLES SMART, M.D.,  
SURGEON U. S. A.

It is well known that, when a saccharine liquid undergoing fermentation has attained a certain alcoholic strength, the further growth of the yeast plant is prevented by the action of its alcoholic product. It is, perhaps, equally well known that an inhibition of the acetous fermentation takes place when the liquid has reached a certain percentage of acetic acidity. But it is not so generally known that the bacteria of putrefaction elaborate, as products of their vital action, organic substances that are destructive to the organisms which determined their formation. The ultimate products in the retrogression of albuminous matters by bacterial or putrefactive agency are ammonia and carbonic acid; but a vast number of complex organic substances, concerning which our knowledge is meagre, constitute intermediate steps in the process. One of these, phenol, or carbolic acid, was at the time of its discovery as a product of putrefaction already well known as an antiseptic, and probable disinfectant. Recently E. and H. Salkowski separated from these intermediate products two aromatic acids of the acetic series, hydrocinnamic or phenyl-propionic and phenyl-acetic acid.

Wernich<sup>1</sup> submitted these to experiment, and found that as antiseptics they were superior to carbolic acid, the phenyl-propionic acid being the more active of the two. Klein<sup>2</sup> followed up these researches by an inquiry into their germicidal value. Some of his experiments bear with greater interest on the life history of the organisms subjected to the influence of the acids than on the germicidal value of the latter; but, to complete this series of preliminary papers, it has been deemed advisable to submit a summary of his results.

This able experimenter recognized the difference between antiseptics and disinfection that has been insisted upon in the reports of this Committee. He exposed the organisms that were the subject of the experiment to the action of the acids, and then introduced them into a suitable culture medium; or, if they were of a pathogenic nature, inoculated animals with them,—a failure to cultivate, or a failure to reproduce the disease being respectively in each case the test of a germicidal or truly disinfectant action.

The non-specific organisms subjected to experiment were a small micrococcus derived from the blood of rabbits, a large micrococcus of similar deri-

vation, bacterium termo and *Bacillus subtilis*. An exposure of twenty or twenty-five minutes in a solution of either acid of the strength 1 : 200, failed to destroy the vitality of any of these specimens; the last mentioned, indeed, was not destroyed by an exposure of twenty-four hours.

The pathogenic matters treated were the spores and bacilli of anthrax, the virus of swine-plague, and that of tuberculosis.

Anthrax spores, exposed for two or more days in either acid of the strength 1 : 400, were found to have retained their virulence when subsequently injected into guinea-pigs, and to be susceptible of cultivation in culture liquids, with the retention of virulence in their progeny. But, although the spores withstood the influence of the acids, the bacilli of anthrax were killed immediately, or as soon as they were thoroughly mixed with this strength of either of the acids. The phenyl-propionic acid, however, was manifestly more efficient, for a dilution of 1 : 800 destroyed the bacilli in ten minutes, while the phenyl-acetic acid under similar conditions failed to accomplish disinfection. Greater dilutions required a longer period to effect the destruction of the bacilli, and in all instances the phenyl-propionic acid showed the greater potency. Thus, while this acid, in the strength 1 : 3200, required from twenty-five to thirty-five minutes to be effective, the phenyl-acetic acid of the same strength required fully thirty-five minutes.

Several other points of interest were developed. It was noted that in greater dilutions than 1 : 400 of either acid, a stronger solution or a longer exposure was required to kill bacilli grown from a previous culture containing spores than those from a culture started from blood bacilli. It was observed further that bacilli cultivated from bacilli of the blood have a greater resistance than the latter, so far as these acids are concerned, for the first week or ten days of the cultivation, but that after this their power of resistance decreases, so that ultimately it becomes even less than that of the original blood bacillus. The fact was also shown that bacilli in the blood of a guinea-pig dead from inoculation with spores have a greater resistance to the influence of the acid than those from an animal dead from inoculation with bacilli.

The virulence of swine-plague, taken directly from an animal dead of the disease, and also that of the artificially cultivated microbe, were destroyed by an exposure of twenty or twenty-five minutes to a phenyl-propionic solution of the strength 1 : 800; weaker solutions were not efficient, and the disinfectant action of the phenyl-acetic acid of this strength was not certain.

The tubercular virus, like the spores of anthrax, resisted the influence of these acids. An exposure of ninety-six hours to a strength 1 : 200 did not prevent the caseous matter of pulmonary tuberculosis from producing its characteristic effects when injected into a guinea-pig. But considerably stronger solutions showed the exercise of an inhibitory power. Bovine virus manifested a greater resistance against the influence of the acids than the tuberculous virus of man.

<sup>1</sup> Virchow's Archiv, vol. 78, p. 51.

<sup>2</sup> Supplement to Thirteenth Annual Report of Local Government Board, London, 1884, p. 111.



## IODIDE OF POTASSIUM IN ECZEMA.

BY HENRY W. STELWAGON, M.D.,

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THE importance of having at command a number of constitutional remedies which are capable, either directly or indirectly, of exerting a favorable influence in so obstinate a cutaneous disease as eczema, is appreciated by all whose practice calls upon them to treat such cases. Probably the most reliable remedy in the average case of eczema is arsenic; but often enough it fails to have an appreciable effect, and, indeed, not infrequently its action is prejudicial, even in cases in which the probability of its good effects was scarcely questionable.

Iodide of potassium is a remedy, which in a number of cases has rendered me good service, and is one, moreover, that is rarely capable of seriously aggravating the disease, as occasionally happens in the administration of arsenic. With the experience so far at command, it would be impossible to say in what particular class of cases it may be found useful. The impression formed, however, would indicate that it is of greatest advantage in subacute and chronic eczema, in which the inflammation is of a moderate grade. Moreover, it seems to have a greater influence in the eczema occurring in persons otherwise apparently in good health. In fact, if a positive conclusion were yet warrantable, it would be to the effect that the remedy finds its greatest use in those cases in which such tonics as cod-liver oil, iron, and bark, are contraindicated. In broken-down subjects, and especially in cases in which the disease has been superinduced by mental worry and overwork, it seems to have but little value; and in cases in which dyspepsia is the main predisposing cause, it rarely benefits, but, on the contrary, will often aggravate. In eczema of the lower extremities, due in part to a varicose condition of the veins, it has but little influence. Nor is its use confined to the adult. In several remarkably obstinate and relapsing cases of eczema in children, it brought about a permanent cure where other remedies failed to have the slightest effect.

The beginning dose for a child of the age of six months to a year, should be a half grain, increased to a grain, or even to two grains, and given three times daily. In children past the age of one year and under three the dose may be one grain, and increased to three grains; in older children, five-grain doses may be reached with favorable effect. It is best administered to children in water flavored with syrup of orange-peel or ginger; in some cases in which the remedy thus prescribed causes gastric uneasiness, a small quantity of a bitter tincture may be substituted for the syrup with advantage. In the adult, the dose at first should be not more than five grains, three times daily, and later increased, if found necessary. If ten-grain doses fail, it is more than probable that larger doses will also be without effect, or may even aggravate. The remedy is not to be continued if it causes persistent nausea. It is borne much more readily when given in Huxham's tincture,

or the compound tincture of gentian, than in syrup mixtures. As a rule, it should be taken well diluted about thirty minutes before meals. There are, of course, exceptions to such a rule. With some persons a dose of medicine before the morning meal excites nausea and vomiting; with such, a dose may be prescribed before the midday and evening meals, and at bedtime. Occasionally it is best borne about two hours after eating. Certainly the remedy seems to have more effect taken when the stomach is empty, provided, of course, it causes no gastric disturbance.

To rely upon any internal treatment exclusively, however, for the relief and cure of an eczema, would mean invariable disappointment. With the potassium iodide, no less than any other remedy, a suitable plan of external treatment is a necessity, if relief is to be expected. Constitutional remedies will often modify the morbid action of the skin so as to promote the favorable effect of external treatment, and render such favorable results permanent; to expect more than this would lead to repeated failures. In conclusion, this particular remedy—potassium iodide—although of great benefit in some cases, will, unfortunately, be found valueless in others.

## MEDICAL PROGRESS.

SUBCUTANEOUS INJECTION OF CAFFEINE.—M. HUCHARD in the *Revue Thérapeutique* of February 15, 1885, suggests the subcutaneous injection of caffeine when its administration by the stomach is contraindicated by its irritating action upon that organ.

The formula he suggests is the following:

R.—Salicylate of soda	. . .	gr. 45.
Caffeine	. . .	gr. 60.
Distilled water	. . .	q. s. ad $\frac{3}{4}$ .

From seven to fourteen grains a day may be administered. The injections lower the temperature in typhoid fever, and combat efficaciously the phenomena due to general depression. The diuretic effects of the drug are especially valuable in the last stages of heart disease.

INJECTION OF BLOOD INTO THE PLEURA.—DR. B. SILVA, in *Il Morgagni*, after experimenting on dogs as to the effect of injections of blood into the pleura, gives the following résumé of his results:

1. The pleura absorbs the defibrinated blood as readily as the peritoneum.
2. The uniform result of injections of defibrinated blood into the pleura (the blood of the same species being always injected) is an increase, in from four to five hours, of the hæmoglobin in the red blood-corpuscles. This increase persists beyond the fourth day after the injection.
3. The maximum increase of hæmoglobin is perceptible in the first twenty-four hours.
4. The absorption of hæmoglobin is greater when the injections are small. If the injected blood produce atelectasis, there is frequently no visible increase in the hæmoglobin.
5. Transfusion of blood into the pleura increases the excretion of urea.—*Centralblatt für Gesamte Therapie*, March, 1885.

**PRESENCE OF ALBUMEN IN THE URINE AFTER THE ADMINISTRATION OF CHLOROFORM.**—MM. FERRIER and PATIN have experimented upon the production of albumen in the urine by the administration of chloroform. Ten experiments in all were performed, and the urine in each was tested before and after the operation. In 6 cases out of 9, albumen was found after, though not before, chloroformization. In the tenth, the quantity of albumen was increased from 9 grains per quart before anæsthesia to 60 grains afterward. This patient died.

In résumé, anæsthesia by chloroform is frequently, but not fatally, followed by albuminuria, thus confirming the experiments of Bouchard, who has observed albumen in the urine of hares after peripheral nervous lesion and after the inhalation of chloroform, even without production of anæsthesia. Under the last condition, hæmaturia has also been observed. M. Ferrier is inclined to attribute the albuminuria to a certain tendency to asphyxia produced by the chloroform.—*Revue de Chirurgie*, Jan. 1885.

**PORRO'S OPERATION.**—DR. VINCINI, on 15th of January, performed Porro's operation upon a rachitic woman. The woman at the time of operation had been in labor twelve hours.

Strict antiseptic precautions were observed, and both mother and child are reported as alive and in good condition.—*Gazzetta Medica di Torino*, Feb. 25, 1885.

**SURGICAL TREATMENT OF VARICOCELE.**—M. HORTÉLOUP, at a recent meeting of the *Académie de Médecine de Paris*, advocated the surgical treatment of varicocele. The following are his conclusions as to the operation:

1. The new methods of antiseptic dressing no longer permit a refusal to operate for painful varicocele, and for varicocele whose weight and length render them burdensome to life.

2. Resection of the scrotum and of the veins of the cord is a harmless operation.

3. The operation need cause no fear of atrophy of the testicle, and seems to increase the genital powers.

4. From a surgical point of view, it gives excellent results.

5. It causes the pain to disappear, and obviates the weight and discomfort.

6. It causes a notable diminution of the varicose spermatic veins.

As a dressing M. Horteloup employs lint soaked in carbolyzed oil. Death has in no case resulted from the operation, and in three cases only has hemorrhage into the scrotum occurred, an accident which is followed by no bad consequences.—*Journal de Médecine de Paris*, Feb. 28, 1885.

**TOTAL EXTIRPATION OF THE UTERUS THROUGH THE VAGINA.**—On January 17, PROFESSOR BOTTINI performed an operation for total extirpation of the uterus through the vagina.

The patient was forty-two years of age and was suffering from uterine cancer. The growth was very vascular, and had caused severe metrorrhagia, from which the woman had become very anaemic. A myoma also coexisted on the anterior uterine walls. The operation

was nevertheless successful, the woman recovering without any sensible rise of temperature.—*Gazzetta Medica di Torino*, March 5, 1885.

**TRAUMATIC CATARACT; ABSOLUTE DISAPPEARANCE OF THE LENS AND CAPSULE WITHOUT OPERATION; PERFECT VISION WITH (?) POWER OF ACCOMMODATION.**—DR. T. H. BICKERTON, in *The Lancet* of March 21, 1885, reports a case of traumatic cataract in which the lens and capsule had entirely disappeared without operation, and in which perfect vision with (?) power of accommodation was present.

Testing showed that not only near vision was perfect, but that at a distance sight was not only good, but of an acuteness beyond the normal.

Two points of interest are present in the case—the idiopathic and complete disappearance of the lens and capsule, and the apparent existence of accommodative power in an eye minus its lens. The first is a pure example of the operation of solution, and the result is that aimed at by every oculist who operates upon a soft cataract. The piece of steel acting the part of the surgeon's needle must have wounded the lens capsule, admitting the aqueous fluid to the lenticular substance. This in its turn would undergo disintegration and eventual absorption, but the process here went further and caused absorption of every particle of the capsule, thus making a perfect result. Though this latter does occasionally occur after operations both on soft and hard cataracts, it is not of common occurrence. Apparent existence of accommodative power in an eye, minus its lens. It is well known that on either side of our strictly mathematical focus for near objects (p.p.) there is a small range of space in which we can see, provided the circles of diffusion are cut off by means of a stenopæic hole, but this space is never very great, and in no experiment that I have made does it extend to six inches. To what, then, can the range for near vision (nearly six and one-half inches) in the present case be ascribed? To accommodation? If so, in what manner does it act?

**DOUBLE OÖPHORECTOMY.**—PROFESSOR SPEDIACCHI recently performed double ovariectomy upon a woman affected with hystero-epilepsy which had resisted all treatment.

The operation was entirely successful, and both ovaries were found to be normal. From the time of the operation the convulsions which previously had occurred seven, eight, and ten times daily, ceased, and have not since returned. The mental condition of the patient is also much improved.—*Lo Sperimentale*, January, 1885.

**COCAINE MIXTURE FOR RELIEF OF COUGH AND VOMITING IN CHRONIC PHARYNGITIS.**—JAHN, in the *Gazette Médicale de Paris*, of March 14, 1885, recommends the following formula for the relief of the cough and vomiting of chronic pharyngitis:

R.—Cocaine	. . . . .	gr. iss.
Glycerine	. . . . .	f3 iv.
Aquæ dest.	. . . . .	f3x 5ij.
Acidi carbol.	. . . . .	gr. ¼.—M.

S.—Apply morning and evening with a suitable brush.

**MENINGOCELE OF THE CRANIUM; TREATMENT AND CURE BY ELASTIC LIGATURE.**—DR. A. LAZZARI, in the *Gazzetta di Torino* of February 25, 1885, reports a case of cranial meningocele successfully treated by elastic ligature. The patient, a child, was first seen when four days old, and there was present over the occipital bone a tumor about the size of an orange. According to the statement of the mother, there had been no increase in its dimensions since birth. The child was normally developed, suckled well, and presented no other physical anomaly. The circumference of the tumor was about ten inches, and its diameter about three inches. The base was much constricted. Examination revealed a deficiency in the bone structure, and pressure showed conclusively that the tumor was in direct communication with the interior of the cranium. Having decided to attempt the operation, by ligature, Dr. Lazzari applied three turns of a small elastic tube about the base of the tumor. The child endured the operation without exhibiting any nervous phenomena, and the night following slept and suckled well. In the morning the tumor had assumed a violaceous hue. The third day the tumor was amputated above the ligature and dressed with iodoform with antiseptic precautions. The twelfth day the pedicle and ligature came away, and on the twenty-second day the wound was entirely healed, the cicatrix having the consistency of fibro-cartilage.

**CHLORIDE OF METHYL AS A TOPICAL REMEDY FOR PAIN.**—MM. TENNESON and BÈGUE at a meeting of the Société des Hôpitaux held February 27, 1885, reported their joint observations on the use of chloride of methyl as a topical application for the relief of pain. They have used the remedy in various diseases, other than sciatica, for which it was first recommended by Debove, with some success. Among the diseases treated, are muscular rheumatism, articular rheumatism, acute or subacute, chronic articular rheumatism, and the pain due to pulmonary tuberculosis, purulent pleurisy, and lobar pneumonia. The success attained has been such as to encourage further trial of the agent.

The writers close their communication with a reference to the accidents which may occur in the application of the remedy. These are prolonged erythema, hyperæsthesia, of the skin, vesication, and eschar. To avoid these bad effects, the use of the remedy must not be prolonged more than five or six seconds, or even a shorter period, in regions where the skin is very delicate. To avoid blistering and eschar, the spray must be directed obliquely, not perpendicularly upon the skin.

Pigmentation, also, sometimes occurs, but it is not so marked as that produced by blisters. Whether it is permanent or in what length of time it will disappear cannot yet be affirmed.—*Gazette Hebdomadaire de Médecine et de Chirurgie*, March 6, 1885.

**REPORT OF THE GERMAN VACCINE COMMISSION.**—The Vaccine Commission which a short time since was appointed by the German Imperial Health Society have returned the following report relative to the pathological and physiological basis of vaccination:

1. A single attack of smallpox, with rare exceptions to the contrary, prevents the possibility of a recurrence of the disease.

2. Vaccination offers a similar protection.

3. The length of time during which vaccination is protective against the disease, widely varies, but the average period is ten years.

4. In order to secure protection against smallpox by vaccination, at least two well-developed vesicles must be obtained.

5. Revaccination is necessary at the end of ten years after the first vaccination.

6. Vaccination of a community affords a common protection against smallpox.

7. Vaccination under certain circumstances may be dangerous, inasmuch as by use of human lymph, syphilis may be communicated. This danger is, however, slight, and with ordinary care can be so reduced that the possible harm therefrom is incomparable with the actual protection attained against smallpox.

8. Since the introduction of vaccination there has been no disease or unusual mortality, which, from a scientific standpoint, can be attributed to the effect of the operation.

**EXPERIMENTAL THYROIDECTOMY IN RABBITS.**—PROFESSOR GUIDO TIZZONI, after much experimental research upon thyroidectomy in rabbits, reaches the following conclusions:

1. Complete extirpation of the thyroid body in the rabbit, is compatible with the life of the animal and produces no change in its health.

2. The functions of the nervous system and the composition of the blood, at least in regard to its richness in hæmoglobin, and the relation between the number of the red and the white blood corpuscles, are not influenced by the removal of this organ.

3. The nutrition and growth are maintained when the operation is performed upon a very young animal.

4. Splenectomy is followed by no graver consequences in animals deprived of the thyroid body than in those from which the organ has not been removed.—*Gazzetta degli Ospitali*, March 28, 1885.

**NEW METHOD OF ADMINISTERING THE BROMIDE AND IODIDE OF POTASSIUM.**—The repugnance with which patients, who for a long time have been under treatment with iodide or bromide of potassium, regard the drugs, and the gastric symptoms so frequently produced by them, have led M. POISSON to introduce them into chocolate. The preparations are in the form of pastilles, each containing four grains of one or the other salt. The disagreeable taste of the drugs and their injurious effect upon the gastric mucous membrane are entirely obviated, and they are thus acceptable to the most delicate stomach.—*Journal de Médecine de Paris*, Feb. 28, 1885.

**CONTRIBUTION TO THE STUDY OF ALBUMINURIA.**—PROFESSOR ALBERT RIVA, in an experimental study of albuminuria, reaches the following conclusions as the solution of the questions:

a. What forms of albumen are more or less filtered through the kidney?

b. What effect does such filtration have upon the renal tissue?

c. What effect does the albumen assimilated or non-assimilated produce upon organic change?



1. The albumen of the egg is filtered most easily, and for this reason produces the most marked albuminuria.

2. Albuminuria is not caused by the peritoneal injection of inflammatory or simple exudates, whatever may be the period of the disease from which they arise.

3. The absence of albuminuria from such causes is verified by cases in which the exudates injected are taken from persons already suffering from albuminuria, either mechanical or nephritic, no matter what the stage may be.

4. Peritoneal absorption does not seem to modify the albumen. There is no difference in results whether the injection is made into the peritoneum or directly into the blood current.

5. The albuminuria disappears rapidly after the albuminous injections are discontinued, though they may have been maintained a long time.

6. In the albuminuric urine are found numerous granular cylinders, which disappear along with the albuminuria, and sometimes even before it.

7. During artificial albuminuria the kidneys are more or less congested, the tubules plainly enlarged, and the epithelium turbid. These changes, however, are equally as transitory as the albuminuria.

8. Organic change, specially studied by examination of the composition of the urine, and from the weight of animals fasting, or fed as usual, is without doubt modified under the influence of albumen, diffusible or non-diffusible; but to determine these modifications exactly, further investigations are necessary.—*Gazzetta degli Ospitali*, January 28, 1885.

X VARIATION IN THE MENSTRUAL FUNCTION.—DR. JULES ROUVIER completes a careful study of variations in the menstrual function with the following conclusions:

1. Deviations from the normal menstrual phenomena assume the form of congestion, hemorrhage, or of morbid supplementary manifestations, such as jaundice, erysipelas, cutaneous diseases, neuralgia, and perversion of the secretions.

2. They may exist in old women; may affect any part of the system, but especially the mucous membranes; and may or may not accompany normal menstruation.

3. They generally coincide with ovulation.

4. They are always referable to some cause which should be sought for as exerting a more or less determining influence upon the locality affected.

5. When there is atresia of the genital organs, arrest of development, or absence of the uterus, exaggerated sensibility of the nervous system, or hysteria, the deviation may be manifested by any organ whatever.

6. When the above conditions do not exist, such deviation will select for its chief location: *a.* a diseased organ; *b.* an organ recently cured of a disease; *c.* an organ in which the physiological demands are intense and transient.

7. When such variation is manifested without apparent cause in the lungs, breast, or stomach, a cancerous or tuberculous diathesis should be suspected.

8. Variation in the menstrual function being a morbid manifestation, necessitates medical intervention and treatment either local or general.

9. Pregnancy and lactation exercise the same influence upon deviations in the menstrual function as upon the normal catamenial flow.

10. Though ordinarily confined to one or several epochs, menstrual deviations may begin at puberty and persist until the menopause.—*Annales de Gynécologie et d'Obstétrique*, March, 1885.

THE PSEUDO-RHEUMATISM OF MUMPS.—DRS. M. LANNOIS and G. LEMOINE, in the *Revue de Médecine* for March, 1885, give clear clinical proof that pseudo-rheumatic complications frequently supervene upon an attack of mumps. Complete recovery from the attacks has always resulted. As to treatment, little or nothing can be said. Rest in bed and sedative embrocations are in most cases all that is necessary. Salicylate of soda, in the cases in which it has been used, seems to be without effect.

The general conclusions arrived at concerning the disease are the following:

1. Mumps are sometimes accompanied by rheumatic manifestations, the relative frequency of which remains to be determined.

2. These manifestations are shown either at the same time as the mumps or rather at their decline, and assume the same behavior as *orchitis* due to mumps. They may not remain limited to the articulations, but attack also the synovial sheaths of the muscles.

3. They affect a subacute condition, and give rise to only moderate pain and swelling, and to general reactions which are not serious.

4. They recur readily and thus prolong the duration of the disease, the cure of which is the rule.

5. They are not truly rheumatic in their nature, but are only local manifestations of the parotiditis.

6. Pseudo-rheumatism may be compared with the pseudo-rheumatism of the infectious diseases, erysipelas, scarlatina, etc.

X COMPLICATIONS OBSERVED IN THE VARIOUS ORGANS OF SENSE DURING THE COURSE OF MUMPS.—DR. FOURNIÉ, in an exhaustive review of the numerous authorities citing cases in which the several organs of sense have been affected during, or subsequent to, an attack of mumps, concludes his paper with the following résumé:

The auditory apparatus is relatively the location of the most serious and frequent effects of mumps. Absolute or temporary deafness and catarrh of the auditory meatus are the principal expressions of such localization.

*I. Absolute Deafness.*—This is of anatomical origin, uncertain in its nature, but resulting probably from a direct miasmatic impression produced by the infectious principle of the disease upon the nervous system. The deafness is characterized by:

*a.* Early appearance.

*b.* Rapidity of production.

*c.* Independence of glandular and other complications incident to mumps.

*d.* Incurability.

No appreciable otoscopic lesion is present, but the symptoms may more or less perfectly simulate those of Ménière's disease. There is no symptom by which the occurrence of deafness is foreshown, or by which the extent of the disease may be prognosticated. All ages, sexes, and forms of mumps are liable to such complication.

*II. Temporary Deafness.*—As a result of mumps, clinical facts well establish the possibility of a transient deafness, different in the time of its appearance, its in-

tensity, and its duration, from that above described. It is rarely complete, and lasts usually about two weeks.

**III. Catarrh of the Meatus.**—In some instances there is produced an auricular catarrh similar to that of the conjunctiva or urethra. This determination of the disease is habitually contemporaneous with the glandular affection, and is produced by a sero-purulent discharge little different from that of ordinary otorrhoea. Its duration is relatively short, and it plays no special part in the determination of those diseases which, occurring subsequently to mumps as well as other diseases, may result in suppuration of the auditory meatus.

As ocular complications of parotiditis have been observed:

1. Conjunctivitis.
2. Inflammation of the lachrymal gland.
3. Sensorial derangements of diverse nature.

The ocular catarrh is usually of little import and of rare occurrence, and only deserves attention from the fact that keratitis sometimes results as a complication.

Inflammation of the lachrymal gland is rare and of the same nature as that of the parotid.

Sensorial derangements are either of early or late appearance. If early, they are only observed in cases of extensive inflammation with abundant discharge. They are due to impediment in the intraocular circulation, and are benign and of short duration.

When they appear late in the disease they are, similar to deafness of the same origin, not dependent upon an exaggerated glandular flux, but have for their origin anatomical atrophy of the pupil, produced by direct impression of the morbid principle of the disease upon the nervous centres. They are serious in their nature and the prognosis is grave.—*Archives de Médecine et de Pharmacie Militaires*, March 16, 1885.

**SPLENECTOMY IN THE RABBIT; ABSENCE OF FUNCTIONAL RELATIONS BETWEEN THE SPLEEN AND THYROID BODY.**—In the *Arch. per le Scienze Mediche*, vol. viii., PROF. G. TIZZONI records the results of experimental splenectomy practised upon rabbits. The number of animals operated upon was eighteen. They were killed at various times after the operation, ranging from twelve to two hundred and forty days and the results as observed carefully noted. The conclusions reached by Prof. Tizzoni are as follows:

1. Splenectomy practised upon the rabbit does not produce appreciable modification in the health of the animal.
2. The age of the animal does not influence the results of the operation, which is endured equally well whether the animal be young or old.
3. The development of the body and the conditions of nutrition are not modified by splenectomy.
4. Absence of the spleen, moreover, exercises no influence upon the function of fecundation and the reproduction of species.
5. Those rabbits born of parents from which the spleen had been removed, presented no variation in size, form, or structure of the spleen, nor alteration in the hæmatopoietic organs or other parts of the body.
6. In the rabbit—different from the dog—splenectomy causes no great modification in the hæmatopoietic organs and tissue, indications being found only in young animals, as would indicate a greater activity in medulla of bones.

7. The thymus and thyroid bodies are not affected by removal of the spleen.

8. The conditions of glandular neoplasia—whether in diffuse form or in circumscribed nodules—which were observed in some animals, probably represented only physiological increase of the organ.

9. From the above conclusions, which represent the immediate results of his experiments, Prof. Tizzoni draws the following inferences:

a. Neither in the dog nor rabbit do there exist any physiological relations between the spleen and the thyroid body; or, at least, in the functions of these organs there does not exist such relations as will enable the one, in the absence of the other, to perform its functions when removed.

b. In the rabbit the spleen and connective tissue of great peritoneal folds cannot in extrauterine life be regarded as hæmatopoietic organs.

c. The differences which are observed in various animals in the results of splenectomy, depend on physiological differences in the function of the spleen in various animals, and do not contradict or disprove each other.

d. From facts observed in experiments entirely upon a single species of animals, general conclusions must not be drawn concerning the hæmatopoietic process.—*Lo Sperimentale*, January, 1885.

**CREASOTE WATER AS A LOCAL ANESTHETIC.**—DR. E. R. SQUIBBS, in the *Ephemeris* for March, 1885, says:

The official aqua creasoti, or creasote water, is so important as a preparation for one special use that it is well to notice it in order to emphasize that special use. It is a simple one per cent. solution of wood creasote in water, and, like similar solutions of carbolic acid and of cresol, it is a most effective local anæsthetic, and topical dressing to burns and scalds. It is no better than the solutions of carbolic acid, or of coal-tar creasote, for this purpose, but it is quite as good, so that whichever is most accessible or most convenient may be used. This creasote water, as made by the above formula,—or diluted with an equal volume of water, or with more water for delicate surfaces in women and children,—and applied by means of a single thickness of thin muslin, or worn-out cotton or linen, such as handkerchief stuff, and the application renewed from time to time, as the return of pain requires it,—will relieve the pain of burns and scalds in five to ten minutes, and will maintain the relief as long as the applications are properly renewed, or until the painful stage is over.

It is also very effective as a local anæsthetic for general use in all painful conditions which affect the surface only, such as the pain of erysipelas. The benumbing effect of these phenols upon the skin is very promptly reached, and can be carried to almost any degree that is desirable, by simple management of the strength of the solutions and the mode of application. They are true anæsthetics to the skin, while the much lauded cocaine is not.

This statement has been published so often during the past twenty years, and the treatment has been so effective in so many hands, that it is wonderful to notice how the common practice is still to use the old and comparatively useless hot dressings, such as carron oil, white lead ground in oil, flour, liniments, etc., or the newer application of solution of bicarbonate of sodium.

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SATURDAY, APRIL 11, 1885.

## THE SURGERY OF PYLORIC STENOSIS.

AN important contribution to the operative treatment of carcinomatous and fibrous obstruction of the pylorus may be found in the *American Journal of the Medical Sciences* for April, in which the author, DR. WINSLOW, of Baltimore, has collated nearly all the examples that had been recorded up to February 9, 1885, of pylorotomy, and its substitutes, gastroenterostomy, gastrectomy, gastrostomy, duodenostomy, and digital division of the pylorus. In all, he has collected 61 excisions of the pylorus, including 1 of his own, 13 gastroenterostomies, 1 gastrectomy, 1 gastrostomy, 3 duodenostomies, and 6 examples of digital division; and he has given a most satisfactory résumé of the indications for, prognosis of, causes of death after, and technique of these different procedures. In the present article, we propose to draw some conclusions as to the justifiability of these operations and their comparative value, availing ourselves not only of the material furnished by Winslow, but of 8 additional examples of pylorotomy from the practice, respectively, of Kuester, Czerny, Lauenstein, Schede, Koehler, and Rydygier, 2 jejunostomies by Surmay and Robertson, 2 pyloric divisions by Loreta, referred to by Holmes in the *British Medical Journal* for February 21, 1885, and 1 gastroenterostomy by Rydygier, the details of which, as well as of 3 new pylorotomies by that surgeon, may be found in the *Deutsche Zeitschrift für Chirurgie*, Bd. xxi., Hefte 5 and 6, 1885.

1. Carcinoma of the Pylorus.—The operations that have been practised up to the present time for carcinomatous stenosis are pylorotomy, gastroenterostomy, gastrostomy, and duodenostomy. The

single case of extirpation of the entire stomach need not detain us, as there is no probability that it will be repeated.

Pylorotomy has been resorted to at least 60 times, of which 45, or 75 per cent., succumbed—29 from collapse, 6 from peritonitis, 4 from gangrene of the transverse colon, 2 from inanition, 1 from exhaustion, and 3 from undetermined causes. Of the 15 survivors, 5 died subsequently of recurrence, respectively, at the expiration of three, four, ten, eleven and a half, and nineteen months; 2 were living with recurrence, respectively, at eighteen months, and three years and nine months; the disease recurred in 1 in eleven months, and Socin performed a gastroenterostomy, the patient being alive at the end of four months, the date of the last report; 3 patients were alive without recurrence at the expiration, respectively, of two, seven, and eleven months; and in 4 the fate is uncertain. In other words, of 56 cases in which the result is known, 75 per cent. perished as the direct result of the procedure; in 72.72 per cent. of the survivors there was a return of the disease; and in 27.27 per cent. there was freedom from recurrence for less than one year. Hence, not a single patient was permanently cured, that is to say, remained free from recurrence for three years. These facts are quite sufficient to condemn the operation, and the opinion that it is unjustifiable is rapidly growing.

Gastroenterostomy, a procedure devised as a substitute for excision of the pylorus when the latter is rendered impracticable by adhesions or the extent of the disease, has been performed 11 times, with 3 recoveries, and 8 deaths, or a mortality of 72.72 per cent. Of the survivors, 1 died in four months, and 2 were still alive at the expiration, respectively, of two and four months. As the mortality is nearly as great as that of pylorotomy, and as the cases in which the operation has been practised were more serious than those in which pylorotomy was done, death in a short time being inevitable without any operation, it is obvious that gastroenterostomy is not destined to become a recognized procedure.

Of gastrostomy and duodenostomy, little need be said. Hahn succeeded in prolonging life for two weeks by opening the stomach and feeding the patient through a tube passed into the duodenum; while Langenbuch's case of the establishment of a duodenal fistule for the purpose of feeding died on the seventh day of inanition.

The frightful mortality of all the operations of which we have presented statistics, the almost inevitable recurrence of the disease, the failure to have effected a single permanent cure, and the slight knowledge which we possess of the extent to which nutrition can be sustained by intestinal digestion alone, are, in our opinion, grave objections to oper-



ative interference in carcinoma of the pylorus. Hence, we believe that such cases should be left to their fate, suffering being palliated by anodynes, and nourishment being afforded by the rectum.

2. Fibrous Obstruction of the Pylorus.—The operations that have been done for fibrous stricture of the pylorus are pylorotomy, gastroenterostomy, duodenostomy, jejunostomy, and digital divulsion.

Excision of the pylorus has been practised in 9 cases, of which 5 recovered, and 4, or 44.44 per cent., died, the causes of death having been peritonitis in 1, collapse in 1, and gangrene of the transverse colon in 2. The survivors were doing well, respectively, at the expiration of one month, three months, six months, six months, and nearly three years.

Gastroenterostomy has been done 3 times, with 1 death from collapse, and 2 recoveries. Of the ultimate fate of the survivors we have no information.

Duodenostomy has been resorted to by Southam in one case, the patient dying from inanition on the third day. Surmay and Robertson lost their patients after jejunostomy, respectively, at the end of eight and thirty hours, so that these measures have proved to be useless.

Digital divulsion of the stomach, as first done by Loreta, has been practised in 8 cases, of which 6 recovered, and 2, or 25 per cent., died of collapse. Of the survivors, 1 was doing well on the third day, and the remainder had perfectly recovered, their digestion being normal, and there being not the slightest evidence of recontraction. In three cases indeed, eighteen, twenty-four, and twenty-seven months had elapsed since the operation.

From the above facts, we think that the conclusion is warranted that Loreta's operation should be preferred in cases of cicatricial stricture of the pylorus. It is far less fatal than pylorotomy, is much more easy of execution, it exposes the peritoneal cavity for only a comparatively short period, and it does not sacrifice a portion of the stomach. We may further conclude, with Winslow, that when digital divulsion is impracticable from the great thickening of the walls of the pylorus, resection is indicated in those who are well nourished, and that gastroenterostomy should be resorted to in greatly debilitated subjects.

In connection with the operative treatment of pyloric stenosis, attention may be called to an entirely opposite method of treatment carried out by DR. RUSSELL, of Birmingham, and recorded in the *British Medical Journal* for February 21. In a man, now aged 55, suffering from a stationary constriction of the pylorus with great dilatation of the stomach, washing out the organ, through which every impurity which would act as a ferment was removed, succeeded in restoring the digestive powers and in sustaining a useful existence for five years, the patient being still

alive. If further experience with this treatment should prove it to be as valuable as in the case of Dr. Russell, Loreta's operation should not be undertaken until irrigation has had a fair trial.

#### ARE WE A NERVOUS PEOPLE?

IN a pamphlet addressed to "The Medical Profession of Brooklyn," that we are a nervous people, is affirmed with all the emphasis given by a ponderous load of vital statistics. It is further assumed as proven in this pamphlet, that a people so oppressed with nervous ailments need a dispensary at whose doors the burden may be unloaded. If the good city of Brooklyn is so afflicted, why not the rest of the country? It is true, in the City of Churches, there are such emotional moralists as Beecher and Talmage, such ingenious men of business as young Ferdinand Ward, and such "tempest-tossed" men of letters as Theodore Tilton; but have we not in Philadelphia an Antivivisection Society? It will be found, we think, on a proper study of the vital statistics of any part of our country, that in every town there are sources of emotional disturbance not unlike those which agitate Brooklyn.

Are we really a nervous people? Is it true, as alleged, that our climate and social condition tend to develop disorders of the nervous system in greater ratio than the zymotic, tubercular, and respiratory diseases? If so, we can reëcho the exclamation of the pamphlet above quoted: "It is then the more startling, that whilst every city in the country has one or more hospitals for the reception of these three classes, there is not one in the land for the adequate reception of the next most frequent class"—i. e., the nervous.

To all the attempts, statistical and otherwise, to demonstrate the greater prevalence of nervous diseases in modern times, we have to oppose two reflections, which may or may not have the dignity of arguments. The first is, the steady increase in the average duration of human life; the second is, the more stable condition of modern society, in respect to both its moral and political relations. Now, as nervous diseases are peculiarly intractable to remedial agencies, and in their very nature prone to a fatal termination, their remarkable extension seems hardly compatible with the increasing longevity of the civilized portion of the human family. The second consideration seems even more weighty. The improved social state; the greater comforts in the home life of the people, in consequence of which the mere struggle for existence is much less harassing; and the more benign and stable governments, leaving the people, for the most part, in the enjoyment of their own possessions, must be conducive to the development of an unexcitable state of the nervous system. In ancient and mediæval times—up to the middle

of the nineteenth century, indeed—society was frequently convulsed with political and moral throes, so that if such influences are causative of nervous derangements, they ought to have been more abundantly manifested in those momentous eras. That nervous derangements should occur more freely when human society is in a less disturbed state, and all the conditions more favorable to a general well-being, seems to us hardly credible, how peremptorily, soever, vital statistics may affirm the opposite position. But all the world knows how very elastic statistics are. The Brooklyn statistics could be made to prove far more than that a dispensary for nervous diseases is needed there; in fact, they could readily establish the proposition that the apparent increase in nervous affections is an outcome of the moral teaching of Brothers Beecher and Talmage.

An examination of the Hippocratic and other ancient medical writings discloses the important fact that affections of the brain and nervous system are treated of just as fully as are other maladies—as fully, relatively, as the same diseases in modern systematic works. In our day, because of the great advances in physiology and pathology, nervous affections are more carefully differentiated, and become thus apparently more numerous. Furthermore, modern society is fructified with a new variety of the human animal—the neurological expert. It is true, in the time of the Egyptian Pharaohs, according to Herodotus, there were specialists for nervous diseases but they subsequently became extinct. We do not find, amongst the records of the brick tablets, or in the cuneiform inscriptions, any references to vital statistics proving the need for Asclepiadæ devoted to nervous diseases, but they must have existed for all that. The neurological expert of ancient days, like his modern prototype, could only have arisen under favoring conditions; hence we must infer, despite the absence of statistics capable of this interpretation, that when this variety of the genus *medicus* flourished, it had abundant material for the exercise of its powers. Although this inference partakes rather of the nature of a syllogism, in which, possibly, we fail to dispose of our middle term, we take refuge in the statement of Mill, that “this inference of one particular fact from another, is a case of induction.”

After this dispassionate review of the medicine of all ages, *more medico*, we are conducted to the conclusion that man has always been a nervous animal, and despite the Brooklyn statistics, not more so in our day than in former times.

#### THE ALBUMINURIA OF DIPHTHERIA AND SCARLET FEVER.

It is well known that albuminuria is a very common complication of both diphtheria and scarlet

fever; that it is as frequent, and probably more so, in the former than the latter. Few, however, have paused to consider whether there is any difference in the immediate conditions which cause it. That the albuminuria of scarlatina is the result of a nephritis is generally understood, and we incline to believe that most physicians would ascribe the albuminuria of diphtheria to the same immediate cause. At the same time no very close examination is necessary in order to reveal important differences in their conditions. How rare, for example, is it to find uræmia or renal dropsy in diphtheria!

SENATOR has called attention to this difference in some remarks recently made before the Berlin Medical Society, and published in the *Berliner klin. Wochenschrift*, Dec. 1, 1884. According to him, the albuminuria of diphtheria is an albuminuria of congestion, altogether unassociated with the phenomena of inflammation, unless the congestion continue a very long time, when we may have superadded what is known as congestion-nephritis, or cyanotic induration. The congestion may be brought about in two ways: first, by an extension of the diphtheritic process to the larynx, the consequent dyspnoea producing a general engorgement which the kidneys share with the rest of the body; or it may occur later in the disease, from paralysis of the vagus, and feebleness of the heart. Such congestion is not infrequently associated with oedema of the lower extremities, which is also favored by the anæmia which is by this time present. An albuminuria from such causes seldom occurs in scarlet fever.

Another form, associated with diphtheria, may be called infectious-febrile albuminuria. This occurs, frequently, early in the disease, or when the throat affection is at its height, and is unaccompanied by any other symptoms of nephritis, such as blood, leucocytes, or epithelium in the urine. Sometimes, indeed, hyaline tube-casts are present, but these do not indicate inflammation. This albuminuria is comparable to that associated with the acme of other fever processes, disappearing with the subsidence of the fever. After death no changes are found in the kidney, or they are confined to limited areas of cloudy swelling of the epithelium, such as is often found without albuminuria.

There is, indeed, a third form of albuminuria in diphtheria, which is neither congestive nor febrile-infectious, but which is due to a mild nephritis, differing from the majority of cases of scarlatinal nephritis in its slighter anatomical changes, as well as in the mildness of its clinical features. In it, interstitial and vascular changes, as well as changes in the Malpighian capsules, are much less marked than in scarlatinal nephritis, and although it is true that higher degrees of nephritis, with their characteristic

clinical phenomena, are sometimes present, their great rarity must be admitted.

It should be stated, however, that HENOCK, to the reading of whose paper on diphtheria succeeded the remarks of Senator, to which we have called attention, is inclined to believe that the diphtheritic albuminuria ascribable to asphyxic congestion, is the rarest form; that the cases in which albuminuria is present are often unattended by fever of any severity. He claims that the albuminuria of diphtheria is almost always the result of infection, and is to be included in the extensive group of infectious nephritis, notwithstanding the fact that Weigert and Fürbringer have failed to discover bacteria in the kidney under these circumstances.

There has always seemed to us a marked difference between the albuminuria of most cases of diphtheria and scarlet fever, and Senator has clearly indicated these differences as they have often presented themselves.

#### MUNICIPAL SANITATION.

THE recent action of the Philadelphia Councils in requesting Chief Engineer Ludlow of the Water Department, to maintain silence upon sanitary matters connected with the water supply of the city, has received the prompt and vigorous condemnation of press and people, as it richly deserved. Fortunately some of the members who foolishly voted for the resolution have been relieved from further municipal duties, yet some of their compeers remain, and as the new Councils are just assembling, a few words on the subject may not be amiss.

Of all the business which will come before them, nothing can approach in importance the question of sanitation; and public agitation on this subject should be welcomed as an evidence that the people will heartily support them in the performance of their highest duties. Instead of being an injury to the city, a vigorous expression of public opinion is a benefit, inasmuch as it tends to impress upon outsiders the fact that sanitary matters are claiming their proper share of attention.

In spite of obvious sanitary defects, Philadelphia is exceptionally healthy when compared with other cities, but such a flattering comparison becomes a positive misfortune if it closes our eyes to the fact that the only true standard of sanitation is the absence of preventible diseases. If 1000 persons die every year from preventible diseases, the burden of responsibility falls no less heavily upon the municipal authorities if they can show that 1500 die yearly of the same diseases in a neighboring city. The bare facts remain that these lives, which might have been saved, have been lost, and that they have been sacrificed in no small measure to the apathy of Councilmen and the greed of contractors.

Guided by the sad lessons of the past, Councils should determine at once to check, so far as lies in their power, this wanton waste of the costliest treasures in the universe—human life and health. To accomplish this end we need a purer water supply, better pavements, actual street-cleaning, the abolition of cesspools and drinking-wells, modern sewers, and popular instruction in the grand truth that filth is poison. The chiefs of the Departments of Highways, Surveys, and Water, should be selected because they possess a thorough knowledge of sanitary engineering and the practical ability for executing public work, and they should not be hindered or insulted while they are doing their utmost to secure our welfare.

Above all, let the Manayunk intercepting sewer be completed without further delay, as it will prove of very valuable assistance in preventing the spread of the threatened epidemic of cholera. We learn with pleasure that funds available for this purpose will shortly be at the command of Councils, and we earnestly hope they will see the absolute necessity for the immediate prosecution of this great work.

To obtain the various blessings we have mentioned, sagacity and honesty in expenditure are the sole requisites. The people have learned that patchwork jobs such as they have hitherto been forced to accept are costly at any price, and if they could feel assured that their affairs would be conducted on simple but strict business principles they would willingly assent to an increase in the present low tax rate, and Philadelphia would soon regain its prestige as the cleanest and most healthful city in the Union.

#### GENERAL GRANT.

THE distressing and disquieting symptoms experienced by General Grant on the 28th of March have not recurred, and the only incident of moment in the following week was a period of faintness on the morning of April 1st, which greatly alarmed those about him and was thought to indicate impending death. This period, however, promptly passed, and since that time his condition did not appear to have been much worse than during the preceding week, until last Tuesday morning, when a slight, but sudden hemorrhage ensued on a fit of coughing, and was followed by a rise of temperature, and greater weakness of the heart. It was deemed injudicious to try to ascertain the exact source of the hemorrhage.

The alarm felt has naturally colored the reports given out, and has increased the painful strain experienced by all. We recognize the difficulty of the position occupied by those who are called upon daily, almost hourly, to record the changes in the patient and to forecast the future, and hope that if circumstances warrant it, they may



find means to allay the immediate anxiety of the community, and limit the pain to that which is inevitable. In a disease that destroys by asthenia, death may come any day, but it may also delay for weeks, and since it is impossible to predict the hour, it is the part of kindness to calm suspense and to spare those who must bear the grief of an actual loss, the painful tension of days of hourly expectation.

#### THE NINTH INTERNATIONAL MEDICAL CONGRESS.

THE General Committee is to be congratulated on the successful consummation of the preliminary steps in the organization of the Washington International Medical Congress. The inherent difficulties of the task were very great. The Committee appears to have been deeply imbued with the feeling that while the scientific aspect of the Congress was the foremost consideration, yet, that it must be maintained with a due regard to geographical distribution. Hence the most prominent and learned members of the profession have been selected to fill the various offices in the Congress and its Sections, and almost every State in the Union is represented in the list. So far, the outcome bears evidence of careful deliberation, and it has been received by the profession and the medical press with expressions of general satisfaction.

### REVIEWS.

THE SCIENCE AND ART OF SURGERY. A TREATISE ON SURGICAL INJURIES, DISEASES, AND OPERATIONS. By JOHN ERIC ERICHSEN, F.R.S., LL.D., F.R.C.S., Surgeon Extraordinary to Her Majesty the Queen; ex-President of the Royal College of Surgeons of England, etc. Eighth Edition, revised and edited by MARCUS BECK, M.S. and M.B. London, F.R.C.S., Surgeon to University Hospital, and Professor of Clinical Surgery in University College, London.

IN noticing the eighth edition of this well-known work, it would appear superfluous to say more than that it has, like its predecessors, been brought fully up to the times, and is in consequence one of the best treatises upon surgery that has ever been penned by one man. The author, however, informs us in his preface that this edition is not, like previous ones, a mere reprint with a few unimportant additions here and there, but that it has undergone "a complete revision." That portion of the work which relates to Pathology has been mainly entrusted to Mr. Beck. It would be impossible within the limits of this notice to examine in detail Mr. Beck's pathological teachings, but as far as we have examined them, they seem to be trustworthy guides to modern pathology. Mr. Beck has also done a share of the work requisite to bring the portions of the book treating of clinical and operative surgery abreast of the times.

The chapter on surgical treatment of some uterine and ovarian diseases has undergone revision at the hands of Wm. A. Meredith, and the chapter describing operations upon the eye has been wisely omitted. Notwith-

standing this the book exceeds the previous editions by several hundred pages.

Many of the old cuts have been redrawn, and some cancelled, and about one hundred and fifty new ones added.

The author states that simultaneously with the English edition an American reprint, and new Italian and Spanish translations will be issued.

Although more than thirty years have elapsed since the first appearance of Erichsen's Surgery, this present edition has been carefully brought up to the times in almost all points. It is most creditable to Mr. Erichsen that rather than follow the too common plan adopted by many authors of repute, viz., to issue as a new edition a merely slightly modified reprint, he has associated with him younger men upon whom the hard labor of a complete remodelling to suit modern pathological views has been laid, while he himself still affords the surgical world the benefits of his old as well as his later experience.

We have always regarded "The Science and Art of Surgery" as one of the best surgical text-books in the English language, and this eighth edition only confirms our previous opinion. We take pleasure in cordially commending it to our readers.

### SOCIETY PROCEEDINGS.

#### NEW YORK ACADEMY OF MEDICINE.

*Stated Meeting, April 2, 1885.*

THE PRESIDENT, A. JACOBI, M.D., IN THE CHAIR.

DR. WILLIAM H. DRAPER read a paper on

#### ANTIPYRIN AND ITS EFFECTS,

which commenced with the statement that while no advance had of late been made in our knowledge of the essential nature of the condition known as fever, it was a fact that the means at our command of successfully treating it were constantly being enlarged. Then taking up the subject of antipyrin, which he mentioned was one of the many derivations of coal-tar, he gave an account of the physiological effects which had been noted in experiments with it upon animals. In very large doses it had been found to produce death by cardiac paralysis, and in somewhat smaller doses irritability of the nervous system, and finally paralysis.

It was first used in the treatment of fever by Filehne, of Erlangen, who gave it in doses of two grammes repeated every hour, until three doses had been taken, and who noticed that when the temperature went up again, after having been reduced by the remedy, it did so without the occurrence of a chill, as was the case when kairin was employed. Dr. Draper then referred to Guttman, Alexander, and several other authors, and said that in many cases the drug had been noticed to produce free diaphoresis. He had himself used it considerably in his service at the New York Hospital since the 1st of October last, and mainly in typhoid fever. His predecessor in charge of the medical wards, Dr. Peabody, had already employed it to some extent, but had been somewhat embarrassed by the small supply of it that could be obtained in the early part of the

autumn. He had, however, been much impressed with its efficiency in reducing temperature, and had also noticed that it seemed to have a very tranquilizing effect upon the nervous system in fever patients.

His own cases of typhoid fever, in which it was used, were twenty in number; seventeen of the patients being males, and three females. Fifteen recovered and five died; the mortality thus being 25 per cent. The highest temperature reached in any of the fatal cases was 107.6°, on the twenty-fourth day of the disease. In one case in which the temperature could not be brought below 104° by the use of baths, it promptly fell to 102°, when antipyrin was given.

In the case in which the temperature was highest among those which recovered, it ranged from 103° to 106.6°; the average range in the whole number of these cases being from 100.6° to 103.6°. Vomiting was quite a frequent symptom. Of the fifteen cases in which recovery took place, there was diarrhoea in seven, and constipation in eight. There was sweating in a considerable number. Nervous symptoms were relatively few.

All the typhoid fever patients were treated either by cold applications (by baths or sponging) or by the use of antipyrin. In giving the latter the general method of Filehne, of Erlangen, was adopted, as a rule; 75 grains of it being divided into two doses of 30 grains and one of 15 grains, and the doses given at intervals of one hour. It was seldom found necessary to use more than 150 grains of the remedy during the twenty-four hours in order to maintain the temperature at an average of from two to three degrees lower than would have been expected if no antipyretic measures had been taken. As a rule, the pulse followed pretty closely the temperature curve; becoming quicker as that rose and slower as it subsided. In all cases antipyrin caused a reduction of the temperature; but in one instance it was found necessary to administer it hypodermically in order to obtain the desired result, no reduction following its exhibition by the stomach. One of the most noticeable effects of the drug was the rapid cleaning up of the tongue under its use; and it also acted very happily in quieting nervous symptoms; depression of spirits being produced by it in only one case. In six cases it caused sweats, and in six an erythematous rash resembling measles; while in a seventh it gave rise to a somewhat purpura-like eruption. These, however, occasioned the patients no annoyance. No change was noted in the urine except in cases in which the complication of parenchymatous nephritis existed.

The largest quantity of the drug was given to one of the patients in whom the disease ended fatally, who took some 350 grammes in thirty days; while the largest quantity given to a case that recovered was 334 grammes during a period of twenty-three days. The latter was a case of great severity. The most marked fall in temperature noted under its use was from 103.8° to 98°. In three cases the antipyretic effect of cold baths and antipyrin was directly compared. In the first case (to which allusion had already been made), it was impossible to reduce the temperature below 104.3° with the baths; but antipyrin promptly brought it down to 102.2°. In the second the lowest point reached under the baths was 102.4°, while under antipyrin it fell to 101.2°. In the third case, however, the difference was not so strik-

ing. Dr. Draper then mentioned a case of puerperal septicæmia in which Dr. Peabody had employed antipyrin with excellent effect in reducing the temperature, and also a severe case of abscess at the New York Hospital.

In scarlet fever and tuberculosis he had found that it invariably reduced the temperature and contributed materially to the welfare and comfort of the patient. On the whole, his observations had been altogether confirmatory of those made by European authorities in regard to the apparent value of antipyrin. At present it could only be commended as a sure and probably safe agent for the reduction of temperature. It did not cure the disease, it was true, but it was not right to condemn it on that account. For the present, it was necessary to be content with being able to control the symptom which caused the most discomfort, and not infrequently endangered the life of the patient. Antipyrin was not an antipyretic in the same sense that quinine and the salicylates were. These agents were ideal antipyretics in the class of cases in which they were specially indicated; while antipyrin smothered, but did not extinguish, the fires of fever. In some cases the latter actually caused a temperature as low as that met with in collapse, though with a total lack of the depression and other symptoms characteristic of this condition. As to the *modus operandi* of the remedy, the vomiting, breathing, and collapse-temperature produced by it seemed to indicate that its special effect was upon the nervous centres; but at present any such hypothesis as to its action was mere speculation.

Dr. Draper then announced his conclusions as follows:

First. Antipyrin is an efficient means for reducing temperature.

Second. It is an apparently safe remedy when administered with prudence, and watched with care.

Third. While it does not abort or markedly modify the course of a febrile disease, it undoubtedly contributes greatly to the comfort of the patient.

Fourth. Occasionally unpleasant effects are produced by it which more than counterbalance the benefit derived from its use.

Fifth. Further experience with it, and a more exact knowledge of the manner in which it is best to administer it, may render it an extremely valuable contribution to the art of healing.

DR. J. LEONARD CORNING said that from the physiological results caused by it, and from the collateral phenomena observed when it was administered in disease, it was reasonable to suppose that the remedy acted through the agency of the nervous centres, and that he was convinced, therefore, that the author of the paper was right in forming the conjecture that this was the case.

DR. LEONARD WEBER said that since the 16th of December, 1884, he had employed antipyrin thus far in fifteen cases. None of them were cases of typhoid fever, but there were cases of pneumonia, bronchitis, and scarlet fever, with high temperature among them, and in not a single instance had he been disappointed by its failure to reduce it. He would like to refer to two or three of them to show the effects of the remedy in his experience. The first case mentioned was that of a child four and a half years old, suffering from

double pneumonia. The temperature was  $105\frac{1}{2}^{\circ}$ , and there was violent delirium. He ordered half a gramme of antipyrin to be given per rectum, and that it should be repeated in half an hour. In a short time the temperature was reduced to  $102\frac{1}{2}^{\circ}$ , and the delirium had disappeared. The next day he gave two doses, of half the quantity, by the mouth, and resolution then occurring, there was no necessity for continuing its administration.

The next case he mentioned was one of scarlet fever in a child of two, and a half years, in which the remedy was given for the purpose of keeping the temperature within bounds. Before the antipyrin was taken the latter was  $105^{\circ}$ , and in this instance he followed a plan of giving it which, as he had recently seen, had now been adopted at the Dresden City Hospital. This was to use it in smaller doses, and repeat them every two or three hours through the day, according to the necessities of the case. The last case that he referred to was that of a lady forty-three years of age, with pneumonia of the upper lobe on one side, whom he had previously treated in two other attacks of pneumonia. The patient got along without any difficulty for two days, but on the third day he found her with a temperature of  $104^{\circ}$ , a pulse of 110, a dusky hue of the skin, and a generally adynamic condition. He ordered three doses of twenty grains of antipyrin, each to be given at one, two, and three o'clock respectively, and at two and a half o'clock she had slight vomiting. The temperature fell rapidly, and was now reduced to  $100\frac{1}{2}^{\circ}$ , while the pulse came down to 96. After that the temperature never rose above  $101\frac{1}{2}^{\circ}$ . Dr. Weber thought it was well, as a rule, to begin with small doses, say eight grains (per rectum) to children, and fifteen grains to adults, and afterwards increase the quantity if it was necessary. In this way it would be possible to avoid the too rapid and perhaps dangerous fall of temperature which was sometimes caused by it. At the Dresden City Hospital there had been six cases in which the temperature was actually lowered to  $92^{\circ}$  or  $93^{\circ}$  by it.

DR. BOLDT said that in two cases of puerperal septicaemia he had given it in not thirty, but sixty grain doses, and that it had been followed by marked prostration; the patients sinking into a semi-comatose condition, and the symptoms generally resembling those of carbolic acid poisoning. He had found that the remedy exerted its action in from three-quarters of an hour to one hour from the time it was given, and its effects did not continue more than three or four hours. He thought it well, as a rule, to commence with twenty or thirty grain doses, and then increase them if necessary. He had not noticed the same relation between the degree of temperature and the pulse which had been observed by Dr. Draper, and in the two cases of puerperal septicaemia referred to, no effect whatever was produced upon the pulse.

DR. FRANK H. KINNICUTT said that he had used antipyrin to a considerable extent, both at St. Luke's Hospital and in his private practice, and that the effects which he had observed were almost exactly similar to those mentioned by Dr. Draper. Among the cases in which he had employed it, were facial erysipelas, scarlet fever, pneumonia, pleurisy, phthisis, and intermittent fever. In his experience, gastric disturbance had been

exceptional, and he said he had been particularly pleased with the certainty of the action of antipyrin in controlling the usual afternoon rise of temperature in phthisis. In this affection, it had been maintained that it was contraindicated on account of its liability to produce more or less profuse sweating; but, in his cases, he had found that this was as frequently absent as present. In one case, under antipyrin, he had noticed a chill occurring as the temperature went up again, as was very often the case when kairin was given; but there was only the one instance of it. There was one case of pneumonia in which a temperature of collapse, but without other serious symptoms, was produced by twenty grains of antipyrin. The patient expressed herself as feeling greatly relieved, and her general condition remained entirely satisfactory. To children, he thought it was well to give two doses of a grain and one-half for each year of the child's life; and he had found that in scarlet fever the remedy was of special value in controlling the high temperature, and rendering the patient comfortable.

DR. GUY L. PEABODY said that he thought that the lack of effect from antipyrin which had been sometimes noted of late might, perhaps, be explained by a fact which he had recently seen stated in the German journals, viz., that the drug was now largely adulterated. In his own earlier experiments he had never failed to produce rapid reduction of temperature in any case in which he employed it; but during the last six weeks he had more than once been disappointed in finding the remedy apparently inert. Thus, in the case of a negro now under treatment at the New York Hospital, who had a temperature ranging from  $103^{\circ}$  to  $106^{\circ}$ , for the past two days he had administered 75 grains of antipyrin a day, in three doses; but without affecting the temperature the fraction of a degree.

At all events, he believed that no harm was done the patient, in ordinary cases, by antipyrin, even if no great benefit might be derived from it; and it had never happened to him to see the force of the heart's action reduced by it. It might be of interest, he thought, to know that it could be given hypodermically with great facility; the drug being readily soluble in hot water and not recrystallizing again, while it was not at all likely to produce any unpleasant local effects. Hence, in any case in which vomiting or other disturbance was produced by giving it by the stomach, the hypodermic method could be substituted for this with advantage. He had personally tested antipyrin in almost all of the ordinary febrile diseases; and in one case of typhoid fever in which no effect whatever was produced by a thorough trial of cold bathing, the temperature was promptly reduced by it. The patient in this case was a very fleshy young woman, upon whose body there was such a thick layer of adipose tissue that it seemed to prevent refrigeration of the external surface from affecting in the slightest degree the temperature of the interior of the system. Before antipyrin was resorted to she had a temperature of  $105^{\circ}$ , with a marked degree of mental hebetude; but under the use of this drug the temperature was quickly brought down, and the sensorium at once cleared up. Altogether, therefore, he thought the remedy was unquestionably worthy of a further test.

DR. DRAPER, in closing the discussion, said that he had himself adopted a plan of administration similar to



that suggested by Dr. Wiln in a number of instances. In one case he found that the use of twenty grains of antipyrin twice a day added very greatly to the comfort and welfare of the patient. All that we could say in regard to this remedy at present was, that it was a very efficient means of treating a symptom. But this symptom of hyperthermy was often one of the greatest importance, particularly in typhoid fever, in which the long continuance of an extreme high temperature in itself was an element of no little danger. By keeping this in control, therefore, we were enabled to save the patient's life in a certain proportion of instances.

DR. ALFRED C. POST read a short paper, in which he gave an account of a

#### NEW OPERATION FOR RUPTURED PERINEUM

which he had devised, and which he believed to be simpler and to provide a firmer perineal body than the operations now in use, while it involved no loss of substance. He acknowledged, however, that the procedure had not as yet been fairly tested, since it had thus far been resorted to in only three cases.

#### CHICAGO GYNECOLOGICAL SOCIETY.

*Stated Meeting, March 20, 1885.*

THE PRESIDENT, H. P. MERRIMAN, M.D.,  
IN THE CHAIR.

DR. J. SUYDAM KNOX read a paper entitled

#### \*THE INFLUENCE OF CIMICIFUGA RACEMOSA UPON PARTURITION.

After a *résumé* of the medical history of the drug, Dr. Knox gave the results of his clinical observations in one hundred and sixty cases of labor—fifty-seven primiparæ, ninety-three multiparæ,—in which black cohosh had been exhibited. The average duration of the first and second stages of labor, in normal cases, in primiparæ, was seventeen and three hours respectively. Under the influence of black cohosh, the duration of the first and second stages of labor, in the fifty-seven cases observed, was six and one-quarter, and one and three-quarter hours respectively. The average duration of the first and second stages, in normal cases, in multiparæ, was twelve and one hours, respectively. Under the influence of black cohosh, in the ninety-three cases, observed, the average duration of the first and second stages was three hours and twenty-seven minutes respectively.

From these clinical observations, Dr. Knox drew the following conclusions:

1. Cimicifuga has a positive sedative effect upon the parturient woman, quieting reflex irritability,—nausea, pruritus, and insomnia, so common in the last six weeks of pregnancy, are always rendered less distressing, and often disappear under its administration.

2. Cimicifuga has a positive antispasmodic effect upon the parturient woman. The neuralgic cramps, and irregular pains of the first stage of labor are ameliorated, and often altogether abolished. In fact during the first indiscriminate use of the drug in all cases, I had the mortification, with a few women, of terminating the labor so precipitately, and without prodromic symptoms, as to be unable to reach the bedside before the birth.

3. Cimicifuga relaxes uterine muscular fibre, and the soft parts of the parturient canal, by controlling muscular irritability, thus facilitating labor, and diminishing risks of laceration.

4. Cimicifuga increases the energy and rhythm of the pains in the second stage of labor.

5. It is my belief that cimicifuga, like ergot, maintains a better contraction of the uterus after delivery.

It is my habit, however, to administer from fifteen to thirty minims of the fluid extract of ergot after the birth of the foetal head, and I have had but few opportunities of testing this effect of the cohosh.

My method of administration has been to give fifteen minims of the fluid extract of cimicifuga in compound syrup of sarsaparilla each night for four weeks before the expected confinement.

One fluidounce of the fluid extract of cimicifuga to three fluidounces of compound syrup of sarsaparilla,—dose, one teaspoonful,—makes just the required quantity.

DR. PHILIP ADOLPHUS had employed the cohosh in the manner indicated by Dr. Knox, in one case with negative results.

DR. EDWARD WARREN SAWYER thought the results obtained by Dr. Knox were astonishing. He thought there could be no doubt that the drug had the physiological action to which allusion has been made. He would at once act upon the suggestion in his private practice.

DR. W. W. JAGGARD thought that if the influence upon parturition, so clearly sketched by Dr. Knox, was capable of demonstration, he could agree with Dr. Sawyer's panegyric. Dr. Knox's carefully prepared paper was worthy of study and investigation. Dr. H. Webster Jones, formerly a prominent obstetrician in Chicago, had advanced similar views with reference to the physiological action of black cohosh, in a paper published in the *Transactions of the Illinois State Medical Society*, a few years since. Dr. Jones's advocacy of the drug as an oxytocic was well known to every practitioner in the city.

DR. JAGGARD desired to call the attention of the Fellows to the following subjects in Dr. Knox's paper.

I. Dr. Knox had stated that the average duration of the first stage of labor in primiparæ and multiparæ was respectively seventeen and twelve hours; under the influence of black cohosh the duration of this stage was abbreviated to six and one-quarter, and three hours, respectively. It was a matter of extreme difficulty to define the limits of the duration of the first stage of labor with such mathematical accuracy. The "personal equation" assumes great importance as a possible source of error. The subjective signs and physical exploration are not always sufficient to justify the diagnosis of the commencement of labor. Thus Dr. R. Lumpe (*Archiv für Gynäkologie*, 1883, Bd. xxi. Hft. i. p. 29) concludes, from the observation of several hundred primiparæ, that the cervical canal begins to dilate from eight to fourteen days before the expulsion of the child. Other observers assign a period of much briefer duration than the typical seventeen hours of Spiegelberg, to which Dr. Knox alluded.

Apart from the difficulty in the determination of the commencement of the first stage, the duration is capable of infinite, individual variation.

II. One hundred and sixty cases were insufficient to warrant such positive deductions upon an intricate therapeutical problem. In every one of the cases cited by Dr. Knox, it was clearly indeterminate whether or no the effect was *post hoc* or *propter hoc*.

Black cohosh had been employed on an extensive scale in large lying-in hospitals in Germany. Every condition for accurate clinical observation had been supplied. Such conditions were: competent observers, numerous cases, under absolute control for a sufficient period of time, chemical purity of the drug, and an approximately perfect system of keeping records. Up to the present time results had been of a purely negative character. It was true that Schatz had reported favorably as to the action of the drug in the treatment of certain pathological conditions of the uterus. Dr. Jaggard did not wish to be understood as dogmatically condemning the drug. The evidence in favor of its action as an oxytocic, as collected from experiments upon the lower animals or from clinical observation, was insufficient to warrant the positive conclusions of the author of the paper. The subject was worthy of further investigation.

III. He thought the practice of the exhibition of ergot before the completion of the second stage of labor was reprehensible. It was in conflict with the obstetrical principles of the day, as deduced from clinical experience and the nature of the case. This remark was applicable exclusively to physiological labors.

DR. CHARLES WARRINGTON EARLE had used black cohosh, at the suggestion of Dr. Jones and Dr. Knox, in a variety of cases with negative results. He had about the same number of precipitate labors as occurred in his practice prior to the introduction of the drug. It was possible that he had not employed doses of sufficient size, nor for a sufficient length of time before labor.

DR. HENRY T. BYFORD wished to enter a protest against all methods of rendering the process of labor shorter. Quick labors were wrong labors as a rule.

DR. GEORGE M. CHAMBERLAIN had no experience with black cohosh, but he was opposed to the exhibition of ergot before the expulsion of the child in physiological cases.

DR. KNOX closed the discussion. In reply to Dr. Jaggard, he said that the results of his clinical experience with black cohosh were of such a convincing character that he would continue the exhibition of the drug in the future. In regard to the exhibition of ergot before the expulsion of the child, he did it to save time. The drug was not absorbed until twenty minutes after exhibition, and long before the expiration of that time the child was born. He could not spare the twenty minutes required to secure retraction of the uterus after delivery of child and placenta. In reply to Dr. Byford, he said that, at the present day, there were no physiological labors. Women were not Eves. By the judicious use of a drug, like black cohosh, labor was made to resemble the ideal, physiological process, as still observed among savages.

The Secretary then read the inaugural thesis of DR. EDMUND J. DOERING, entitled

#### SOME REMARKS ON THE VALUE OF PERMANGANATE OF POTASSIUM IN AMENORRHEA.

After a brief description of the physical and chemical characters of the drug, Dr. Doering discussed its physio-

logical action. Bartholow, who has great faith in the drug, claims that although it parts with its oxygen with great readiness, this readiness is *not* sufficiently great to prevent the distribution of this gas into the blood. "His opponents deny this and argue that the organic matter contained in the stomach and mucous membrane is sufficient to appropriate the oxygen of the salt and thus prevent its entrance into the circulation."

Prof. N. Gray Bartlett, a Chicago chemist, gives the following opinion:

"From the readiness with which the permanganate of potassium is decomposed by organic compounds, it would seem to be ineligible for internal use. When so administered, it is immediately brought into contact, in the stomach, with a relatively large amount of organic matter and must necessarily be very rapidly destroyed, the manganese of the permanganate separating, in all probability, in the form of the hydrated manganese dioxide. The latter compound is an active oxidizing agent, and is possibly capable of exercising in the economy the oxidizing function which has been ascribed to the permanganate of potassium. It would seem rational, therefore, anticipating the change which follows the administration of the permanganate, to substitute the hydrated dioxide of manganese, which can readily be prepared in a state of purity for medical use.

"Whatever view may be adopted as to the chemical change which the permanganate undergoes in the human economy, the main question is as to its therapeutic value."

Prof. T. Gaillard Thomas, in his address to the New York State Medical Association, expresses faith in the value of the drug as an emmenagogue. Dr. Ringer and Dr. Murrell recommend the remedy. Dr. Doering had given the drug a careful trial in thirty cases of amenorrhœa, depending upon anæmia and general atony of the sexual apparatus. In about half the cases the observations were unsatisfactory from various causes—*i. e.*, inattention to the general directions, want of perseverance in taking the medicine, so that the conclusions arrived at were based upon fourteen cases, in each of which the cause of the amenorrhœa was entirely clear, the remedy carefully and continuously given, and the effect clearly observed.

The cases were tabulated conclusions:

I. Permanganate of potash in doses of from two to four grains is an efficient emmenagogue, if administered for a period of not less than two weeks.

II. Its administration in doses large enough to be effective, is accompanied by severe pain which frequently necessitates a discontinuance of the remedy, and, hence, impairs its value as an emmenagogue.

III. The most efficient method of administering the drug is in capsules, taken midway between meals and followed by large draughts of some pure mineral water, like Silurian.

#### NEW YORK SURGICAL SOCIETY.

*Stated Meeting, March 24, 1885.*

THE PRESIDENT, R. F. WEIR, M.D., IN THE CHAIR.

DR. A. C. POST presented a patient who had a  
GANGLION OF THE WRIST,

which he had treated by puncture and evacuation of the contents, and whose case he had already reported

to the Society about one month ago. There remained only a slight hardness in the situation of the swelling. It was possible that there was a slight reaccumulation of fluid, and it might be necessary to resort to further operative procedure.

Dr. Post also presented a patient on whom he had performed an operation for

#### HYPOSPADIAS

on the third of February, 1885. The patient was over thirty years of age, the floor of the urethra was deficient to the extent of about two centimetres behind the corona glandis. The operation consisted in making a perineal incision into the membranous part of the urethra, and introducing a short catheter into the bladder, and then dissecting a flap of integument four-fifths of an inch wide on the lower surface of the penis, extending back nearly to the scrotum, and denuding a space two-fifths wide on each of the flaps and extending them forward on the under surface of the glans. The flap was then doubled on itself and drawn forward as far as the glans, and its edges attached by fine sutures to the outer edges of the denuded spaces. The deep layer of the doubled flap, which was designed to form the floor of the urethra, was not attached by sutures, but left to attach itself. The wound was washed with a solution of mercuric bichloride, 1 to 1000, and dusted with iodoform. To take off the tension from the base of the transplanted flap, a V-incision was made behind the base of the flap, the triangular flap of skin dissected up from its base, and the sides of the triangle drawn together with sutures, converting the V into a Y. The wound healed perfectly, and the floor of the urethra was thus extended forward beyond the corona glandis. The catheter was withdrawn from the perineal wound within a fortnight after its introduction, and the patient passed his urine freely through the reconstructed canal. Within a very few days the wound of the perineum was entirely healed.

The PRESIDENT asked Dr. Post if he did not attribute the success in a great measure to the perineal opening.

Dr. Post replied that he did.

Dr. J. L. LITTLE asked if there was any marked curvature of the penis.

Dr. Post answered, "No, sir; there was only a slight tendency to curvature."

The PRESIDENT said that the marked curvature of the penis did not usually take place unless the opening in the urethra was further back.

Dr. MCBURNEY said it was noticeable that a prominent author on genito-urinary diseases had stated that to make an opening in the perineum like that resorted to by Dr. Post is adding a major operation to a minor one. It has always seemed to Dr. McBurney as being absurd to make such a criticism on the perineal opening, as it was a simple operative procedure, and the opening was one which readily closed.

The PRESIDENT said he had had occasion to open the perineum five times in the treatment of anterior fistulas by plastic operations, and in no instance was there any failure in the rapid spontaneous closure of the perineal opening for other genito-urinary troubles, and in no instance was any risk to the patient added by the operation.

Dr. MCBURNEY had had one patient with extensive fistulous opening in the urethra which required four operations for its cure, and in that instance he made an opening in the perineum which closed after each operation upon the urethra, so as to make it necessary to reopen it each time before doing the next operation.

The PRESIDENT said that within a few months he had closed in one patient three openings in the normal urethra from tertiary ulceration situated in the corona glandis. The operation consisted of vivifying the edges of the fistulas after making a perineal opening. The broad, freshened edges of the prepuce and inferior surface of the glans were sewed up with several rows of catgut sutures, and in this manner a perfect success was obtained. He thought the multiple rows of fine catgut sutures, as well as the perineal opening, contributed to the good result.

Dr. LITTLE remarked, with reference to Dr. Post's case of ganglion of the wrist, that it seemed to him the sac was beginning to refill. He had had a similar case under treatment in which the swelling extended above and below the wrist, and in which he made a free incision, and followed it by the application of a compress for some time, and it seemed to be entirely cured. Subsequently, however, the patient came under observation, and it was found that the sac had refilled, and Dr. Little made a second incision. The tumor was a kind of double swelling, and contained the fluid ordinarily seen in ganglia, with the exception that he did not find any of the so-called rice bodies.

Dr. Post said that if the sac in his case should refill he should make a more free opening and treat it as an open wound.

#### CARCINOMA OF THE PAROTID; SUCCESSFUL REMOVAL OF THE ENTIRE GLAND.

Dr. L. A. STIMSON presented a patient, a man sixty-four years of age, from whom, twenty days previously, he extirpated the parotid for carcinoma. The growth made its appearance four years ago, and of late had increased in size rather rapidly, and when the patient came under observation the tumor involved the skin to the extent of about one and one-half inches by two inches.

Dr. Stimson brought the case before the Society, first, because complete extirpation of the parotid is said by some writers to be too hazardous to be undertaken. In this instance there was no difficulty in removing the gland, and the only vessel of much size which was divided and ligated was what seemed to be the temporal branch of the external carotid, the bifurcation into it and the internal maxillary appearing to be much lower than usual.

Of course, there was complete facial paralysis. The entire gland was involved in the tumor, except at the deeper part, where it seemed to be healthy. The growth had invaded the sterno-cleido-mastoid muscle just below the mastoid process.

At the close of the operation, Dr. Stimson was able to cover the entire wound by a skin-flap, and at the end of a week it had all healed except at the orifice of the drainage-tube; but during the second week it became evident that the deeper upper part of the cavity left by removal of the gland had not closed, and that is now present as an opening about one-third of an inch in



depth, running up in front of the mastoid process. There was also another point low down under the chin, which marked the position of a defective suture where the borders of the incision had not united. At the same time, the wound has remained practically without pus. It was treated by irrigation and bichloride solution during the operation, and dressed with iodoform afterward.

In reply to a question, Dr. Stimson said that the tumor superficially was movable, but the deeper posterior and upper portion was very firmly adherent.

#### ABNORMALITY OF THE INTERNAL CAROTID ARTERY.

In making a dissection before the operation, Dr. Stimson encountered a peculiarity of the internal carotid artery, which consisted in an S-shaped fold or turn, about one inch above the bifurcation, which drew the artery into a loop three-fourths of an inch across, placed transversely in the neck, so that the upper portion of the loop was three-fourths of an inch superficial to the line of the artery itself.

#### PARALYSIS OF THE TRAPEZIUS, SERRATUS MAGNUS, AND RHOMBOIDEI.

Dr. Stimson also presented a patient, a man thirty-two years of age, who had always been healthy until the present trouble, which began five months ago with pain in the right side of the neck, followed by difficulty steadily increasing in the use of the right arm and inability to raise the hand to the head, which is now very marked, and with which there is inability also to use the shoulder, especially in bringing it forward. He can raise the arm to the horizontal line, but no further; and when he does so, or when he presses with the raised hand against an object in front, the vertebral border of the scapula becomes very prominent, and the soft parts between it and the spine are deeply depressed to fill the space left between the scapula and the wall of the chest. The line running from the point of the shoulder to the side of the head, formed by the trapezius, is much less full and prominent than on the other side. The deltoid and scapular muscles seem normal, and the inability to raise the hand to the head appears to be due to weakness of the upper fibres of the trapezius.

Recalling the patients whom Dr. Gerster presented to the Society some time ago, he had presented the man partly that the Society might have the opportunity to see him, and partly to obtain a diagnosis. The muscular reaction had been tested by some neurologists with electricity, and the patient had been told that there was marked degeneration of the rhomboid muscle and of the trapezius, but not of the serratus magnus, and that the reaction was not that of degeneration.

The question in Dr. Stimson's mind was, What muscles are at fault, and what is the cause of the paralysis?

The posterior border of the scapula is held down to the chest not by the action of the serratus magnus alone, but by the conjoined action of the posterior fibres of the trapezius, the rhomboidei, and the serratus magnus, and, therefore, when either one of these muscles is paralyzed, the border of the scapula can leave the chest; and the question therefore arises, Which of them, in the present case, is affected, or are all? The levator anguli scapula seemed to be perfect. There was no specific history,

and there was no wasting of the muscles of the hand, as might be expected in progressive muscular atrophy; nor was there any history of traumatism.

DR. GERSTER had seen a somewhat similar case in an adult girl after dislocation of the shoulder-joint, in which instance there was paralysis of the serratus magnus on the injured side, due to traumatism accompanied by paralysis of almost all the muscles surrounding the shoulder-joint, a complication which, according to Busch, of Bonn, was not at all uncommon.

DR. POST remarked that it was hardly conceivable that any single muscle should be paralyzed by itself, unless it was supplied by a single nerve, which distributed branches to no other muscle, as in the case of the fourth and the sixth cerebral nerves.

DR. MCBURNEY presented a patient upon whom he had performed

#### EXCISION OF THE KNEE-JOINT.

Henry J., thirty-five years of age, a coachman, was admitted to the hospital May 19, 1884. The patient's family history was good; his previous health had been excellent, and there was no history of venereal disease. Four years ago he slipped and struck his left knee, and was laid up for four days. Two years after this the knee became swollen, and the leg was fixed upon the thigh at an angle of forty-five degrees, which lasted for two weeks. There was then an interval of eighteen months, in which the knee seemed to be nearly well. Six months ago the knee began to swell, and to be painful, and three and a half months ago an incision was made, from which pus discharged very freely. Since that date four additional openings in the thigh and leg had been made for the evacuation of pus. Last May Dr. McBurney found the patient with a general suppurating joint, eroded cartilages, sinuses burrowing in every direction through the thigh and leg, and almost down to the ankle-joint, separating the muscles of the calf. He performed complete excision and removed all the joint structures, and thoroughly curetted all the sinuses. The dressings from the date of operation to July 15th were changed as occasion demanded. On August 30th, the sinuses on the anterior and posterior surfaces of the limb were laid open, and again, also, on October 2d, sinuses on the outer side of the leg were laid open and curetted. On November 26th, there was excellent bony union; the foot was in a state of talipes equinus. On February 23, 1885, there was a small sinus, not leading to bone, on the anterior surface of the limb, which, on March 24th, had been healed for some weeks.

The result was a shortening of the limb of not quite three inches, with bony union, which was found to be complete six months after the operation. The bone was treated without either wire, or nails, or other apparatus, except an external apparatus to obtain apposition of the fragments, a method which Dr. McBurney thought possessed advantages. The incisions through the bone were straight. There remained some paralysis of the flexors of the foot which also existed before the operation. The result was not a handsome leg, but Dr. McBurney thought it was much better than a wooden one.

He had performed excision of the knee-joint in nine cases, and in all union had taken place rapidly, the

longest period being six months after the operation, and the shortest six weeks, in the case of a child.

He had had another case in which union took place, and in which he did not use either wire or nails, but simply an outside splint, and the result was satisfactory. Concerning a third case treated in this manner, he was unable to report.

Other things being equal, it was desirable to avoid the introduction through bones of substances which where not absolutely essential.

DR. POST remarked that the evil resulting from the introduction of wires was not very formidable.

DR. MCBURNEY remarked that the results were not very serious, but at the same time he had seen prolonged discomfort, considerable pain, and suppuration resulting from the presence of such foreign bodies, and unless the advantage attending the presence of the wire or nails was very compensating, he thought they had better not be used. This was an important point which could, however, only be decided by further experience. In a case like the one just reported, which was the worst he had ever seen, he thought the result was in favor of not using wire to hold the surfaces in apposition.

DR. GERSTER thought that the question could not be decided so simply as this. He believed that there were cases in which the use of wires and nails was not necessary, whereas they might be in some cases essential to get good apposition of the fragments. For instance, if the surgeon had to deal with a fat or very muscular subject, where the fixation of the resected joint in the splint was more difficult than in lean individuals. He had not wired many bones, but he had used nails in six or seven cases—two of exsection of the knee-joint, two in the performance of Mikulicz's operation, and after a number of necrotomies—and had found them exceedingly useful and non-irritating. In the first case of knee exsection, the nails had not been disinfected properly, some suppuration took place, and tuberculous granulations sprung up which rendered revision of the knee-joint necessary, and on laying open several sinuses and removing the granulations, the wounds healed, excellent bony union of the same surfaces had taken place almost immediately after the operation. In other cases no reaction followed the use of nails, and as soon as the nails were withdrawn the tracts closed up without suppuration. Dr. Gerster thought the trouble experienced in the removal of nails was far smaller than from the use of wire, but that their proper disinfection was essential.

DR. LITTLE asked how long the nails were allowed to remain.

DR. GERSTER replied that it depended upon circumstances. He had left them in as long as four weeks. The nails need not do any harm, as they are no more irritating than so much clean silver wire.

THE PRESIDENT remarked that the nails certainly added firmness to the limb, and were easily removed.

DR. MCBURNEY agreed with Dr. Gerster with regard to the use of nails and wires, but he thought there were few cases in which exsection of the knee or shoulder was demanded in the fat subject. Of course, the operation might be demanded in some cases of traumatism, but the point was not whether nails could be borne without causing irritation, but whether nails were necessary. That they could be borne, there was no question whatever; but, on the other hand, there were cases not in-

frequently, in which the bone was so disorganized, and abscess cavities were so large, that practically there was not sufficient bone left in which the nail could enter and be of any service.

DR. YALE said that he had seen one of Dr. McBurney's cases in which he thought that neither nails nor wire would have held the bone together.

DR. MCBURNEY remarked that it was a case of this character which first led him to try to keep the bony surfaces in apposition without any special kind of retentive apparatus.

DR. STIMSON said that there was another question of importance in the treatment of these cases, laying aside the question of how much benefit either wire or nails afforded. It was well known that the bone encountered in excision was not tough strong tissue, but was spongy, could be readily broken down with the gimlet, and that whatever instrument was used for making the holes for inserting the wires or nails usually made a hole much larger than itself.

The leg and thigh together constitute a very long, heavy body, and any lack of support of the foot will produce a change of angle at the section unless the union there is stronger than that furnished by a nail driven into the spongy bone, as he had seen it, was likely to be. The same was true of wires; those which are used are ordinarily not strong enough to stand any heavy strain, such as can be given by partial weight of the foot, but even if they were, the bone through which they pass is rapidly absorbed about them. In his own last case, one yielding an excellent result, the wire loops promptly became loose and fell out spontaneously.

Dr. Stimson thought that the result desired which could not be obtained with wire could be obtained by attention to one point in the dressing, that is, to support the limb with the heel considerably higher than the buttock in a splint which does not take hold of the limb below the knee, and thus allow the thigh to sink away from it. If this method is observed, simply lifting the limb and placing it upon a posterior splint, gravity keeps the leg in apposition with the thigh, and all that the wires can do in addition is to keep the segments from being rotated one upon the other. The simple action of gravity alone will keep the two cut surfaces of bone in contact, unless the limb is so suspended that the leg alone is fixed and the thigh allowed to sag away from it. The limb should lie loose on a posterior splint, a gutter, so that the leg can follow the thigh as the buttock sinks in the bed.

THE PRESIDENT said that he must, however, add that from his experience the introduction of nails did stiffen up the divided bones.

DR. SANDS said that his experience in the use of nails in excision of the knee was limited to two cases. The first was that of a man upon whom he performed the operation a little more than one year ago, employing three nails, which from his lack of experience were not very skillfully introduced. One of the nails which was driven in the median line from below upwards, penetrated so near the popliteal space that, as a matter of precaution, it was removed on the second day. The other nails were allowed to remain two weeks, when being found quite loose they were removed.

The other case was one in which he had excised the knee-joint two weeks ago. It was one of white swelling

of an aggravated character, occurring in a girl sixteen years of age, with very extensive abscesses and sinuses running up to the middle of the thigh as well as down the leg. He introduced three nails in the usual manner, and although the osseous tissues were somewhat soft, considerable force was required to insert them. Dr. Sands was satisfied that the mechanical advantage derived from their use in this instance was very great. It became necessary to dress the wound forty-eight hours after the operation, and three dressings had since been made on account of the soiling of the bandages. While changing the dressings the advantage of using the nails was shown in the fact that the limb could be readily lifted without disturbing the apposition of the sawn surfaces, and at the present time, two weeks after the operation, the nails had not loosened their hold. His own inclination would be to use nails in preference to wire, and if they could be shown to be harmless, as it seemed to have been demonstrated, they should be tried as a means of getting better apposition than could be obtained by the use of external splints, they would also appear to be particularly useful in a case like this one, in which frequent dressings were required.

DR. GERSTER asked Dr. McBurney how he treated the abscesses situated about the knee-joint.

DR. MCBURNEY replied that they were all freely laid open and curetted; that they were heavily lined with granulations, and they were as thoroughly scraped as possible, after which they were thoroughly irrigated by bichloride solution, and, wherever possible, were packed full with iodoform gauze. Some of them required several scrapings; but, as far as possible, they were laid open at the first operation.

THE PRESIDENT remarked that he was very much impressed with the treatment of such sinuses which he saw at Kiel, at Esmarch's clinic, where they were laid open and dissected out and sutured together with deep catgut sutures, after which they healed promptly.

DR. GERSTER said that he raised the question for the purpose of referring to what he regarded as a widespread error. It had been said that if drainage-tubes were used after exsecting tuberculous joints, and were left in for a certain length of time, persistent and troublesome sinuses would remain behind as a consequence of the use of the drainage-tubes. This seemed to him to be erroneous, since he thought that any sinus kept open by a drainage-tube, whose walls were in a healthy condition, would close up almost immediately after removal of the tube. If a sinus did not close up, it was due to the fact that it was lined with granulations of a specifically morbid character, containing tubercle bacilli, whose granulations are prone to decay and lack the tendency to form cicatricial tissue. The form of treatment referred to by Dr. McBurney was the only proper one, and removal of the entire capsule and all the tuberculous, viz., cheesy and gelatinous, tissues about the joint was essential to a speedy and thorough cure. In Germany all these foci were methodically removed as if they were malignant disease, the entire capsule was excised, and in almost all cases the operation wound healed by primary union. He had seen seventeen cases in Kiel in which this had taken place. Whenever such diseased tissues were left behind, a relapse of the tuberculosis was established, and gen-

erally all the remaining healthy parts of the granulating wound were again infected.

DR. BRIDDON said that he had seen three cases illustrating this condition within the last two or three months. In one there was a sinus nearly in front of the head of the humerus, which was opened and scraped out thoroughly. It contained tuberculous tissue. The cavity was filled with iodoform, a bone-drain was introduced, and the operation wound required only one dressing afterward. The sinus healed completely, and all the motions of the shoulder-joint were restored within one month. In another case the sinus was in a similar condition, and was treated in the same way with the same good result. Both of these cases occurred in children, and the first dressings were removed at the end of two weeks. In another case of tuberculous disease of the knee-joint all the granulations were removed from the deep recess of the sinuses, and three bone-drains were introduced. When the dressings were removed, at the end of thirty days, it was found that union had not taken place, and it was doubtful whether it would ever occur.

DR. J. C. HUTCHISON then read a paper entitled

TWO CASES OF LIGATURE OF THE COMMON CAROTID ARTERY FOR TRIGEMINAL NEURALGIA.

(See page 394.)

DR. POST remarked that one important point brought forward by the reader of the paper was the influence of dampness on neuralgic affections. He believed it had been shown that change of climate exerted a powerful influence on such affections, especially going from a dry to a damp climate. This miner had a recurrence of his difficulty after returning to his occupation. Dr. Post regarded this as an important point with reference to the treatment of these forms of neuralgia.

MULTIPLE RUPTURE OF THE ILEUM.

THE PRESIDENT presented a specimen which showed the possibility of laparotomy in abdominal injuries. An employé of the elevated railway got caught between two cars and was severely jammed. The immediate effects were not specially prostrating, as the patient walked from the Chatham Street Station to the Grand Street Ferry, also three or four blocks on the other side of the river before reaching his home. When he arrived he complained of considerable pain in the abdomen, and called a physician. This occurred on a Sunday. With the exception of some increase in the frequency of the pulse and tenderness of the abdomen, the patient did very well until Wednesday evening, when he began to vomit. After a very short time the vomiting became stercoraceous, and the physician in attendance, supposing that he had to do with obstruction, administered a very large enema, which was followed by a great deal of pain, and the patient's condition rapidly grew worse. Dr. Weir was asked to see him on Thursday evening, and to be prepared to perform laparotomy, but on his arrival the man had been dead about two hours.

The autopsy was held three hours after death. There was a sharply outlined ecchymosis stretching across the belly just below the umbilicus. It was found that the contusion had torn apart the fatty tissues to the extent of four or five inches on each side of the median line,



but that the muscular tissues had not been torn except a very few fibres, and that there were several blood extravasations under the peritoneum, which, however, was not torn. The ileum at the distance of nearly two feet from the cæcum bore marks of injury, consisting in three lacerations, and between two of these openings for a distance of six inches there was a mass of gangrenous gut, from the damage done apparently to the mesentery. Around this there was some fecal extravasation, bound in generally by recent adhesions. At one place there was apparent giving away of this limitation of inflammatory product, and there a slight extravasation of fecal matter toward the loin on that side had taken place.

It was a case which had it been seen earlier, and the abdomen opened, would have offered a very good chance for a successful issue, as the injury was limited, and up to Wednesday evening the patient was in a fair condition.

DR. SANDS asked if there were any signs by which a diagnosis could have been made early.

THE PRESIDENT replied that the appearance of the symptom of vomiting, conjoined with the history of the case, would have warranted the surgeon in making an exploratory incision.

## NEWS ITEMS.

**CHOLERA PRECAUTIONS IN ILLINOIS.**—In connection with the Sanitary Survey of the State and House-to-house Inspection, now being prosecuted under direction of the State Board of Health with reference to the probable appearance of Asiatic cholera in this country, the Board has just issued circular-letter No. 6, addressed to county clerks, and requesting that the work of getting public institutions into good sanitary condition be completed with as little delay as possible. Much work of this character was done during the past summer and fall, in response to the circular-letter of the Board issued in July last. But, in addition to what remained to be done when cold weather suspended operations, there must since have accrued, in many cases, accumulations of filth and refuse which should now be promptly removed; defects in plumbing, drainage, and sewerage, disclosed during the winter, should be repaired; and the effects of the occupancy of dormitories, workshops, wards, cells, and other apartments should be remedied by a thorough spring cleansing.

The officers in charge of almshouses, jails, and all other public buildings under the control of the County Board, are notified to commence this work at once.

Especial attention should be given to the location and condition of privies and water-closets at these places, as also at court houses and elsewhere. Vaults should be emptied before warm weather makes such work dangerous, and then be thoroughly disinfected with sulphate of iron (copperas). Where these vaults are within fifty feet of any source of water-supply—well, spring, pond, lake, or running stream—their further use should be abandoned, and, after being emptied, they should be disinfected and filled up with clean, dry earth—one of the best disinfectants. The new vault should not be less than fifty feet from the nearest water-supply; should be water-tight; ventilated by a four-inch shaft, opening above the roof; the contents should be kept inoffensive

by the use of some cheap disinfectant; and the building and its surroundings should be kept in the cleanest attainable condition. Where practicable, the substitution of the earth-closet system for the subterranean vault-storage is recommended. In either case the frequent removal of the contents, and their safe disposal, by use as fertilizers, are necessary sanitary measures.

The source of water-supply, and its storage and distribution, should be carefully inquired into, and all possible causes of pollution should be removed. A pure water-supply is of the first importance to health under all circumstances; but among numbers of persons living under the conditions which obtain in county institutions, its importance is increased. Epidemics of diarrhoea and dysentery may be caused by impure water; while typhoid fever and Asiatic cholera are spread more commonly through the water-supply than in any other way.

These remarks and suggestions will indicate the character of the work which the Board considers it desirable should be accomplished before warm weather sets in, not alone through fear of cholera, but in the interest of public health, and, consequently, of true economy.

A similar circular was recently issued to railroad managers, setting forth that the spread of Asiatic cholera is due oftener to the pollution of the water-supply than to any other one cause. There is no commoner mode of such pollution than through foul, badly constructed and improperly located privies and water-closets. The disease, in this country, being always due to importation, and its spread being, most commonly, by persons travelling from place to place, it follows that railway privies and water-closets are especially exposed to the danger of cholera infection. In view of these facts, it is requested that all such places in connection with stations, freight houses, shops, and round-houses be at once inspected and put in good sanitary condition.

Responses have been received from nearly all the roads, and one of the most important lines has already completed the work indicated along the entire extent of its road.

**THE INTERNATIONAL MEDICAL CONGRESS, WASHINGTON, 1887.**—The Committee on Organization of each Section is composed of the President, the Vice-Presidents, and Secretaries of the Section, and of the Council. The list of the officers was published in our issue of last week. The following are announced as the members of the several Councils.

**SECTION I.—MEDICAL EDUCATION, LEGISLATION, AND REGISTRATION.**—*Council:* Nathan S. Davis, M.D., LL.D., of Chicago; Henry D. Didama, M.D., of Syracuse, N. Y.; Henry Gibbons, M.D., of San Francisco; Daniel C. Gilman, LL.D., President Johns Hopkins University, of Baltimore; James F. Harrison, M.D., of University of Virginia; Charles A. Lindsley, M.D., of New Haven, Conn.; William Pepper, M.D., LL.D., of Philadelphia; J. F. Prioleau, M.D., of Charleston, S. C.; John H. Rauch, M.D., of Springfield, Ill.; L. McLane Tiffany, M.D., of Baltimore.

**SECTION II.—ANATOMY.** *Council:* Harrison Allen, M.D., of Philadelphia; Frank Baker, M.D., of Washington; Thomas Dwight, M.D., of Boston; Francis L.

Parker, M.D., of Charleston, S. C.; Charles T. Parkes, M.D., of Chicago; Thomas T. Sabine, M.D., of New York; Nicholas Senn, M.D., of Milwaukee; Francis J. Shepherd, M.D., of Montreal; Robert W. Shufeldt, M.D., of U. S. Army; Burt G. Wilder, M.D., of Ithaca, N. Y.

SECTION III.—PHYSIOLOGY. *Council:* G. Baumgarten, M.D., of St. Louis; Henry G. Beyer, M.D., of U. S. Navy; Henry P. Bowditch, M.D., of Boston; Henry F. Campbell, M.D., of Augusta, Ga.; Austin Flint, Jr., M.D., of New York; William Lee, M.D., of Washington; John J. Mason, M.D., of Newport, R. I.; S. Weir Mitchell, M.D., of Philadelphia; Henry Sewall, M.D., of Ann Arbor, Mich.

SECTION IV.—PATHOLOGY. *Council:* Christian Fenger, M.D., of Chicago; Reginald H. Fitz, M.D., of Boston; Edward G. Janeway, M.D., of New York; James B. Johnson, M.D., of St. Louis; Thomas E. Satterthwaite, M.D., of New York; George M. Sternberg, M.D., of U. S. Army; James Tyson, M.D., of Philadelphia; William F. Whitney, M.D., of Boston.

SECTION V.—MEDICINE. *Council:* Samuel C. Chew, M.D., of Baltimore; William H. Draper, M.D., of New York; William H. Geddings, M.D., of Aiken, S. C.; William W. Johnston, M.D., of Washington; George A. Ketchum, M.D., of Mobile; Francis Minot, M.D., of Boston; William Pepper, M.D., LL.D., of Philadelphia; Beverley Robinson, M.D., Andrew H. Smith, M.D., of New York; James T. Whittaker, M.D., of Cincinnati.

SECTION VI.—SURGERY. *Council:* John Ashhurst, Jr., M.D., of Philadelphia; David W. Cheever, M.D., of Boston; Phineas S. Conner, M.D., W. W. Dawson, M.D., of Cincinnati; George E. Fenwick, M.D., of Montreal; Frederic H. Gerrish, M.D., of Portland, Me.; J. C. Hutchison, M.D., of Brooklyn; Christopher Johnston, M.D., of Baltimore; Levi C. Lane, M.D., of San Francisco; Thomas M. Markoe, M.D., of New York; Alan P. Smith, M.D., of Baltimore; J. Ford Thompson, M.D., of Washington; Theodore R. Varick, M.D., of Jersey City; Samuel B. Ward, M.D., of Albany, N. Y.; Robert F. Weir, M.D., of New York.

SECTION VII.—OBSTETRICS. *Council:* Robert P. Harris, M.D., of Philadelphia; Alfred F. A. King, M.D., of Washington; William T. Lusk, M.D., of New York; Matthew D. Mann, M.D., of Buffalo; Theophilus Parvin, M.D., of Philadelphia; John Scott, M.D., of San Francisco.

SECTION VIII.—GYNÆCOLOGY. *Council:* William H. Baker, M.D., of Boston; William Gardner, M.D., of Montreal; William Goodell, M.D., of Philadelphia; A. Reeves Jackson, M.D., of Chicago; J. Taber Johnson, M.D., of Washington; George H. Lyman, M.D., of Boston; Emil Noeggerath, M.D., T. Gaillard Thomas, M.D., of New York; Ely Van de Warker, M.D., of Syracuse, N. Y.

SECTION IX.—OPHTHALMOLOGY. *Council:* Cornelius R. Agnew, M.D., Charles S. Bull, M.D., of New York; Swan M. Burnett, M.D., of Washington; A. W. Calhoun, M.D., of Atlanta, Ga.; Hasket Derby, M.D., of Boston; Samuel J. Jones, M.D., of Chicago; Herman Knapp, M.D., Edward G. Loring, M.D., of New York; William F. Norris, M.D., of Philadelphia; W. W. Seely, M.D., of Cincinnati; Samuel Theobald, M.D., of Balti-

more; Oliver F. Wadsworth, M.D., Henry W. Williams, M.D., of Boston.

SECTION X.—OTOLOGY. *Council:* Albert H. Buck, M.D., of New York; John Green, M.D., of St. Louis; J. Orne Green, M.D., of Boston; Stephen O. Richey, M.D., of Washington; Daniel B. St. John Roosa, M.D., LL.D., Samuel Sexton, M.D., of New York; George Strawbridge, M.D., of Philadelphia.

SECTION XI.—DERMATOLOGY AND SYPHILIS. *Council:* I. Edmondson Atkinson, M.D., of Baltimore; L. Duncan Bulkley, M.D., Edward L. Keyes, M.D., Fessenden N. Otis, M.D., Robert W. Taylor, M.D., of New York; Edward Wigglesworth, Jr., M.D., of Boston; Henry C. Yarrow, M.D., of Washington.

SECTION XII.—NERVOUS DISEASES AND PSYCHIATRY. *Council:* Roberts Bartholow, M.D., LL.D., of Philadelphia; Allen McLane Hamilton, M.D., of New York; Walter Hay, M.D., LL.D., of Chicago; Francis T. Miles, M.D., of Baltimore; James J. Putnam, M.D., Samuel G. Webber, M.D., of Boston; Horatio C. Wood, M.D., of Philadelphia; John P. Van Bibber, M.D., of Baltimore.

SECTION XIII.—LARYNGOLOGY. *Council:* F. H. Bosworth, M.D., of New York; William H. Daly, M.D., of Pittsburg; E. Fletcher Ingals, M.D., of Chicago; J. N. Mackenzie, M.D., of Baltimore; George W. Major, M.D., of Montreal; E. Carroll Morgan, M.D., of Washington; William Porter, M.D., of St. Louis; E. L. Shurley, M.D., of Detroit, Mich.

SECTION XIV.—PUBLIC AND INTERNATIONAL HYGIENE. *Council:* Henry B. Baker, M.D., Lansing, Mich.; Alfred L. Carroll, M.D., of Albany, N. Y.; Granville P. Conn, M.D., of Concord, N. H.; William H. Ford, M.D., of Philadelphia; Daniel W. Hand, M.D., of St. Paul; Jerome H. Kidder, M.D., of Washington; Charles A. Lindsley, M.D., of New Haven, Conn.; J. N. McCormick, M.D., of Bowling Green, Ky.; J. H. Rauch, M.D., of Springfield, Ill.; Joseph H. Raymond, M.D., of Brooklyn, N. Y.; Joseph R. Smith, M.D., of U. S. Army; Stephen Smith, M.D., S. O. Van der Poel, M.D., LL.D., of New York; H. P. Wolcott, M.D., of Cambridge, Mass.

SECTION XV.—COLLECTIVE INVESTIGATION, NOMENCLATURE, AND VITAL STATISTICS. *Council:* Nathan Allen, M.D., of Lowell, Mass.; Richard A. Cleeman, M.D., of Philadelphia; J. H. Hollister, M.D., of Chicago; Abraham Jacobi, M.D., of New York; James T. Reeve, M.D., of Appleton, Wis.; James Tyson, M.D., of Philadelphia.

SECTION XVI.—MILITARY AND NAVAL SURGERY AND MEDICINE. *Council:* Edmund Andrews, M.D., of Chicago; Delavan Bloodgood, M.D., of U. S. Navy; R. B. Bontecou, M.D., of Troy, N. Y.; John H. Brinton, M.D., of Philadelphia; Julian J. Chisolm, M.D., of Baltimore; P. O. Hooper, M.D., of Little Rock, Ark.; E. J. Marsh, M.D., of Paterson, N. J.; Claudius H. Mastin, M.D., of Mobile; George Peck, M.D., of U. S. Navy; W. F. Peck, M.D., of Davenport, Iowa; Charles Smart, M.D., of U. S. Army; J. Rufus Tryon, M.D., of U. S. Navy; Alfred A. Woodhull, M.D., of U. S. Army.

SECTION XVII.—PRACTICAL AND EXPERIMENTAL THERAPEUTICS. *Council:* Robert Amory, M.D., of Boston; Edward Curtis, M.D., Laurence Johnson, M.D., of New York; Henry M. Lyman, M.D., of Chi-

cago; Samuel Nickels, M.D., of Cincinnati; Isaac Ott, M.D., of Easton, Pa.; Daniel Webster Prentiss, M.D., of Washington; Charles Rice, M.D., of New York; Charles H. White, M.D., of U. S. Navy; Thomas F. Wood, M.D., of Wilmington, N. C.

SECTION XVIII.—DISEASES OF CHILDREN. *Council*: F. Forchheimer, M.D., of Cincinnati; John M. Keating, M.D., of Philadelphia; William Lee, M.D., of Baltimore; John H. Pope, M.D., of Marshall, Texas; John H. Ripley, M.D., of New York.

SECTION XIX.—DENTAL AND ORAL SURGERY. *Council*: W. C. Barrett, M.D., of Buffalo; Thomas Fillebrown, M.D., of Boston; F. J. S. Gorgas, M.D., of Baltimore; Edward Maynard, M.D., of Washington; H. J. McKellops, D.D.S., of St. Louis; W. H. Morgan, M.D., of Nashville; C. Newlin Peirce, D.D.S., of Philadelphia; L. D. Shepard, D.D.S., of Boston; James Truman, D.D.S., J. W. White, M.D., of Philadelphia.

THE AMERICAN SURGICAL ASSOCIATION will hold its annual meeting in the Army Medical Museum, Washington, on April 21st, 22d, 23d, and 24th. The following papers are announced as the programme:

1. The Field and Limitation of the Operative Surgery of the Human Brain. By John B. Roberts, M.D., of Philadelphia.
2. An Experimental and Clinical Study of Air Embolism. By N. Senn, M.D., of Milwaukee.
3. Nephrectomy; its Indications and Contraindications. By Samuel W. Gross, M.D., of Philadelphia.
4. Nephrolithotomy. By L. W. McLane Tiffany, M.D., of Baltimore.
5. The Healing of Arteries in Man and Animals after Ligation. By J. Collins Mann, M.D., of Boston.
6. The Immediate Cure of Fistula in Ano. By Stephen Smith, M.D., of New York.
7. Etiology of Tetanus. By P. S. Conner, M.D., of Cincinnati.
8. A Case of Cholecystotomy. By C. T. Parkes, M.D., of Chicago.
9. Some Points in the Surgery of the Hypertrophied Prostate. By J. W. T. Gouley, M.D., of New York.
10. Phosphorus Necrosis; its Causes, Treatment, and Prevention, with Reports of Cases. By J. Ewing Mears, M.D., of Philadelphia.

STATE MEDICAL SOCIETY MEETINGS.—The Medical Society of the State of Tennessee meets at Nashville, and the Medical Association of the State of Alabama meets at Greenville, on Tuesday, April 14th.

The Medical Society of California meets at San Francisco, the Mississippi State Medical Association meets at Greenville, and the Medical Association of Georgia meets at Savannah, on Wednesday, April 15th.

THE GERMAN SURGICAL CONGRESS met in Berlin on the 8th inst., and the following papers were announced to be read:

1. BRUNS (Tübingen), Concerning Cretinism after Extirpation of the Thyroid Body.
2. VOGT (Greifswald), *a*. The Simple Method for the Radical Cure of Hydrocele; *b*. The *Technique* of Gastrotomy.
3. BIDDER (Berlin), The Origin and Cure of Intestino-utero-vaginal Fistula.

4. BRAUN (Jena), The Operative Treatment of Intussusception.

The committee in charge of the organization of the meeting suggest that members of the Congress will on the occasion of the present meeting make known either verbally or in writing their experience concerning the more recent operations for harelip. It is desirable to state:

*a*. To what extent and how often the palatal bone probably heals.

*b*. What method of operation gives most favorable final results.

*c*. And the results of total removal of the palatal bone.

It is also desirable that information be afforded as to the relative condition of adults who were operated upon during childhood by a given method.

It is also proposed to discuss the surgical aspects of tuberculosis.

THE CHAIR OF PHYSIOLOGY AT THE UNIVERSITY OF PENNSYLVANIA.—At a meeting of the Board of Trustees of the University held on Tuesday last, Dr. Edward T. Reichert, Demonstrator of Experimental Physiology at the University, was assigned to deliver the lectures on physiology during the coming year, pending a vacancy in the professorship of physiology.

JEFFERSON MEDICAL COLLEGE, of Philadelphia, held its annual commencement on the 2d instant, and the degree of M.D. was conferred on 176 candidates. The degree of LL.D. was also conferred on Dr. Austin Flint, Jr., M.D.

OBITUARY RECORD.—Died in New York on April 4th, of peritonitis, JAMES LAWRENCE LITTLE, M.D., Professor of Clinical and Operative Surgery in the New York Post-Graduate Medical School, and Professor of Surgery in the University of Vermont. Dr. Little was born in Brooklyn, on February 19, 1836, and studied medicine under the late Dr. Willard Parker, and graduated from the College of Physicians and Surgeons. He served as an army surgeon during the civil war.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT, U. S. ARMY, FROM MARCH 31 TO APRIL 6, 1885.

GARDNER, JNO. DE B. W., *Captain and Assistant Surgeon*.—Ordered for temporary duty at Fort McHenry, Md.—*S. O. 64, Department of the East*, March 28, 1885.

CARTER, E. C., *First Lieutenant and Assistant Surgeon*.—Granted one month's leave, with permission to apply for one month's extension, to take effect upon the arrival of another medical officer at his post.—*S. O. 30, Department of Arizona*, March 23, 1885.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE UNITED STATES MARINE-HOSPITAL SERVICE, FOR THE WEEK ENDING APRIL 4, 1885.

MURRAY, R. D., *Surgeon*.—Granted leave of absence for one week, March 31, 1885.

BRATTON, W. D., *Assistant Surgeon*.—To proceed to New York, N. Y., for temporary duty, April 2, 1885.

WATKINS, R. B., *Assistant Surgeon*.—To proceed to New Orleans, La., for temporary duty, April 2, 1885.

#### APPOINTMENTS.

The following candidates having passed the examination required by the Regulations were appointed Assistant Surgeons by the Secretary of the Treasury, April 1, 1885, viz.:

WILLIAM D. BRATTON, M.D., of South Carolina, and RALPH B. WATKINS, M.D., of Connecticut.